

**Improving Services, Effectiveness, and Efficiency
at The University of North Carolina at Greensboro
December 2009**

**UNCG's Review of 10 Areas Identified in the July 2009
Bain Report at The University of North Carolina at Chapel Hill**

Submitted December 14, 2009 to
Chancellor Linda Brady
by

UNCG Review Committee
James Clotfelter, chair
Alan Boyette
Steve Rhew
(with the assistance of people across the campus)

Improving Services, Effectiveness, and Efficiency at UNCG
Table of Contents

A. Introduction	3
B. Executive Summary: Challenges for UNCG, compared to the UNC-CH Bain Report	4
• Procurement	5
• Information Technology	6
• Finance	14
• Human Resources	16
• Centers & Institutes	19
• Research & Compliance	23
• Energy Services	26
• Facilities Services	27
• Space Utilization	28
C. Organizational Structure	30
D. Procurement narrative.....	30
E. Information Technology narrative	33
F. Finance narrative	38
G. Human Resources narrative.....	44
H. Centers & Institutes narrative.....	46
I. Research & Compliance narrative.....	47
J. Energy Services narrative.....	48
K. Facilities Services narrative	50
L. Space Utilization narrative	52
M. Conclusions & Next Steps for UNCG	53
N. Appendix	55
• Organizational Structure	55
○ AAF divisional report.....	55
○ BAF divisional report.....	56
○ ITS divisional report	57
○ SAF divisional report	58
○ UA divisional report	58
• Information Technology.....	61
○ IT positions	62
○ IT governance structure	63

A. Introduction

In July 2009, The University of North Carolina at Chapel Hill released a report from Bain & Company, entitled “Cost Diagnostic: Final Cost Summary,” with accompanying commentary from Chancellor Holden Thorp. This report was widely shared across the University of North Carolina System and beyond. It is referred to here as the “UNC-CH Bain Report.”

On September 16, 2009, Chancellor Linda Brady of The University of North Carolina at Greensboro informed UNC General Administration that:

“UNCG will review the Bain & Company Final Report prepared for UNC-Chapel Hill and identify options applicable to our continued efforts to reduce administrative expenses and improve the efficiency and effectiveness of our organization.”

She asked James Clotfelter, Vice Chancellor for Information Technology Services, to undertake this study. A three-person committee was formed, with Alan Boyette, Vice Provost, and Steve Rhew, Associate Vice Chancellor for Finance, joining Dr. Clotfelter. The committee called on expertise throughout UNCG to address the ten areas included in the UNC-CH Bain Report. The committee presented its report to Chancellor Brady on December 14, 2009.

The goal of this study is do as thorough a review as time permits of the challenges UNCG faces in these ten areas, and to identify options for improved services, effectiveness, and efficiency. In each area, the report seeks to look both back (recent history) and to the future (next steps). Neither the committee nor UNCG is suggesting that Bain & Company has reviewed UNCG or made any recommendations relating to UNCG’s organization or operations. This UNCG report is an internal study that grows out of a campus-wide effort to continue the major improvements this campus has made in the past decade in services, effectiveness, and efficiency.

Format

The Executive Summary of this report comments on UNCG’s “Challenges” and “Options,” in light of the summary “Challenges” and “Options” found in each section of the UNC-CH Bain Report. This section is presented in tabular form similar to that of the UNC-CH Bain Report. This section of the UNCG report also includes detailed tabular information on particular initiatives underway or under consideration in several areas. In some cases, additional discussion is needed before initiatives can begin. Quotations from the UNC-CH Bain report included in the Executive Summary are shown in blue; everything else was written at UNCG.

For “Organizational Structure,” general comments are made about UNCG. Each UNCG division was asked to summarize its structure in light of the UNC-CH Bain Report’s Section I, and these are included in the appendix.

In addition, for each of our counterpart sections to the Bain report’s Sections 2-10, there are narratives providing detailed descriptions of challenges and options at UNCG. These are provided separately, after the Executive Summary. Following the conclusion, an appendix includes supplementary information.

B. Executive Summary

#1 Organizational Structure			
	Apply to UCG?		UCG Issues
	Yes/No	How/Why?	
Challenges:			
1. Organizational structure <ul style="list-style-type: none"> • Organization is 10 layers deep in some areas • Over 50% of supervisors have 3 or fewer direct reports • Distributed nature creates very small departments in some areas 	No Exact % unavail. In places	UCG rarely deeper than 4-6 layers Where specialization requires it Where specialization requires it	See divisional statements in the appendix
Options:			
1. Policy changes <ul style="list-style-type: none"> • Adopt effective policies and procedures to prevent growth of additional supervisory layers across the university 	No	No sign that supervisory layers are increasing	
2. Organization changes <ul style="list-style-type: none"> • Set near-term goals for reducing layers and increasing spans of control across the university • Decrease number of layers and increase spans of control through several years of attrition 			Major reductions in administrative areas taken as part of 2008-10 budget reductions.

#2 Procurement

	Apply to UNGC?		UNCG Issues
	Yes/No	How/Why?	
Challenges:			
1. Decentralized purchasing decision rights <ul style="list-style-type: none"> Vendor fragmentation Disparate pricing 	No & Yes	Only Purchasing issues PO's But purchases under \$5,000 can be made without competition.	
2. IT systems not fully automated <ul style="list-style-type: none"> Some manual processes Data capture insufficient - limits analysis 	No Yes	ERP is in place (Banner) Do not use Commodity codes	Single days purchase may require multiple requisitions, 1 vendor per req.
3. Limited collaboration between M&DS (Purchasing & A/P) and internal customers <ul style="list-style-type: none"> Hinders spend optimization Hinders setting/enforcement of policies 	Yes	No central repository of contact/vendor information	Banner does not handle change orders and blanket orders efficiently. There are sometimes issues w/the department coding of fund and account information.
4. Few resources dedicated to actively managing and reducing spend.	Yes	Limited resources and tools	
Options:			
1. Interim internal solution <ul style="list-style-type: none"> Increase focus on strategic analysis Short term solution while waiting for ERP Look to shed non-core logistical capabilities 	No	UNCG is moving to SciQuest which is integrated w/Banner. It should allow for easy use by departments & maximize spend.	
2. Share resources <ul style="list-style-type: none"> Utilize existing systems to reduce manual processing & improve data capture 		Data capture will be enhanced; allows for options on approvals	
3. Hire a third party to provide procurement functions		SciQuest will automate the entire purchase to pay process. It provides a one-stop shopping environment. There is a search and compare feature which allows for quick requisitioning and saves user time. Funding is checked.	SciQuest provides better handling and control of blanket orders and change orders.

#3 Information Technology

	Apply to UCG?		UNCG Issues
	Yes/No	How/Why?	
Challenges: 1. Distributed functions often drive redundant infrastructure (hardware & software) and support capabilities <ul style="list-style-type: none"> Nearly 50% of servers are outside of central ITS Many areas run their own web servers, databases, email, etc. 	No	Much smaller scale than Chapel Hill	Expanded ITS resources or constrained client demand are needed to reduce client demand for separate systems
	Yes	Most departments do not run servers; primarily web, databases	ITS resources do not meet demand level and have been reduced due to recent budget cuts
2. Current IT decision-making process is fragmented and unclear <ul style="list-style-type: none"> Central ITS and distributed IT leadership are often unsure who holds key decision rights 	No Yes	Prioritization process & governance well documented for enterprise administrative systems Less clear for academic	Must continue efforts to educate “end user” clients on administrative system governance. Academic technology decision-making roles need clarification.
3. Distributed units lack trust and confidence in ITS’ ability to provide comprehensive support <ul style="list-style-type: none"> Similar mistrust sometimes exists between distributed departments and school or division central IT office 	Yes Probably	Lack of sufficient ITS resources and historical issues	Ongoing efforts to improve collaboration require area leadership buy-in and support. Potential for issues to emerge.
Options:			
1. Unit consolidation <ul style="list-style-type: none"> Remove “hidden” IT infrastructure and support that exists within distributed departments and sub-units Potentially cluster some schools/divisions together 	Maybe? No	Possible opportunity in some areas to bring together staff now assigned to departments? Specialized needs and relatively small existing staff make efficiency gains unlikely	Each area should assess own opportunities Better to focus efforts elsewhere
2. ITS consolidation <ul style="list-style-type: none"> Provide space, hosting and support for ‘commodity’ IT systems (database, email, etc.) in ITS Provide space, hosting and support for diversity of value-add IT systems in ITS 	Yes Yes		Exists today, but must expand/improve to better meet client demand (e.g., web). Progress expected w/new ITS “application administration” group, & scientific computing needs assessment

UNCG is considering the following additional options:

<u>Task</u>	<u>Status</u>	<u>Responsibilities moved</u>	<u>Resources moved</u>	<u>Savings or cost avoidance or improved operations outside ITS due to consolidation</u>
1. Consolidate management of UNCG homepage	Done	To ITS: See 9/11/09 "Procedure Changes for UNCG Homepage Maintenance" and 9/22/09 "Summary"	None. ITS will use existing Client Services staff.	Cost Avoidance: UA reduced 1 FTE position as part of budget cut; UA able to redeploy additional 1 FTE position to other UA tasks
2. Formalize WebFOCUS report coordinator role in ITS to help promote efficiency in reporting	Training proposal expected to go to ASC in Dec 09	<p>To ITS:</p> <ul style="list-style-type: none"> • WebFOCUS training (not offered today) • User Group Coordination (at least initially) • Report review role – to achieve better efficiencies through expanded use of dashboards <p>To Others: The vision is that distributed units will opt to become more self-sufficient by taking on more responsibility for ad hoc reporting and/or making expanded use of reporting dashboards.</p>	Probably none. ITS will use existing Banner/Data Management staff	<p>Cost Avoidance: Creating dashboards and setting parameters are expected to reduce time that distributed unit report writers spend creating discrete, mundane reports and free their time to work on more complex reporting. WebFOCUS training and launch of a Users Groups will build a network of WebFOCUS users who can help each other.</p> <p>For report requests that do go to ITS, the ITS work includes a review role to identify potentially duplicative reports (where an existing report appears the same, or similar to, the request to the ITS reviewer). In this case, the requestor would be contacted by the reviewer so that a joint decision could be made regarding how to proceed. Overall, adoption of this model of shared report-writing responsibility, evaluation of requirements to avoid creating duplicative reports, and increasing the use of reporting dashboards is expected to reduce time spend by both central ITS and</p>

				the distributed units on report writing, reduce turn-around time for new reports, and free up resources for other work.
3. Create central “application administration” support group for smaller IT applications across the campus	Spring 2010	To ITS: ITS would begin to perform application administration functions for apps such as FAMIS, Studio Abroad, Ad Astra. Note: This is conceptualized as a voluntary program. Must take care to not take on more apps than the group can support (expect 5-6 apps per person).	None - Group would have 1 FTE new position established from ITS funds, plus 2-2.5 FTE redeployed ITS positions	Cost Avoidance: Cost avoidance \$ unknown, but sizeable; other divisions would no longer have to pay vendors, staff, or graduate students to provide application administration support for selected applications; support by ITS employees more cost effective in most cases than contracting with the vendor
4. Improve controls on campus technology purchases – Workstation/Client Hardware <ul style="list-style-type: none"> Require all campus desktop and laptop purchases to go through campus-wide hardware procurement unless explicit exception is granted by the purchasing division. Could begin w/administrative units. Each campus division must set up and enforce its own exception process Standardization requirements could be expanded to other devices (e.g., printers, netbooks) after CHP Phase II Note: Expansion to other	TBD	To ITS: May require addition of technology purchase review role for ITS. Due to staffing levels, Purchasing may be unable to enforce new controls without ITS involvement. Historical purchasing data is being reviewed to assess volume of work. To Other Units: Purchasing would need to modify procedures to include appropriate review by ITS, if ITS serves as the enforcer. Divisions would need to implement processes for exception requests. Divisional centralization of technology purchases could facilitate standardization. Note: May be affected by State bulk pricing regulations and/or SciQuest implementation. PCard failure to comply can only be addressed post-purchase.	None	Cost Savings: Units would save \$ by getting highly discounted pricing for standard equipment compatible with the University computing environment. Need for exceptions would be better vetted, avoiding unnecessary extra expenses. Cost Avoidance: ITS and distributed technology staff would provide more efficient and better quality support due to greater equipment standardization.

hardware such as servers could be considered for the future.				
<p>5. Improve controls on campus technology purchases – Software</p> <ul style="list-style-type: none"> • Implement new controls on software and hardware purchases to reduce purchase of software that cannot be cost-effectively utilized • A cost threshold could be set to trigger review (suggested threshold would be determined by analysis of past purchasing data) 	TBD	<p>To ITS: ITS would need to review purchases over the threshold amount for compatibility and feasibility.</p> <p>To Others: Purchasing would need to alert ITS to requests needing review.</p>	None	<p>Cost Savings/Avoidance: Units could save \$ and time by not purchasing software and other equipment that is difficult or impossible to implement, or requires costly vendor intervention to work properly. Units could be directed to more cost effective solutions, and/or discounted contract pricing where appropriate.</p> <p>Cost Avoidance: ITS and other technology staff would save time by not unexpectedly being called to support technology incompatible with UNCG’s computing environment. Complex implementations could be better planned for and scheduled, avoiding long delays, frustration and confusion during implementation.</p>
<p>6. Provide central ITS support for technology-enabled business processes that are widespread across campus and that senior management agrees should become enterprise services. Potential opportunities include:</p> <ul style="list-style-type: none"> • Document imaging (Nolij) • e-Print 	TBD (could not begin in 2009-10)	<p>To ITS: ITS would take responsibility for centralized application engineering and/or administration duties currently distributed among campus business units.</p> <p>Note: “System Inventory” analysis by ASUG Technology group may identify other opportunities.</p>	TBD – Additional staff FTE would be required depending on opportunities selected. Transfer of software and equipment \$ may also be required.	<p>Cost Avoidance: Units could save time currently devoted to supporting these systems. Some \$ for staffing would be transferred to ITS, but efficiency gains would allow an increase in staff FTE that could be re-purposed within units for other work. Improved, enterprise-level service would be available to all campus units desiring such services. ITS would be positioned to respond to client demand for assistance with these systems.</p>

<ul style="list-style-type: none"> Others TBD 				
<p>7. Make better use of technology to improve efficiency of 'paperwork'/electronic form processing, especially through expanded use of Banner Workflow. Potential opportunities include:</p> <ul style="list-style-type: none"> Streamline HR paperwork processing (e.g., epaf's) Others TBD 	TBD	<p>To ITS: No uniquely new responsibilities, but expansion of current work.</p> <p>To Others: Units streamlining processes must lead projects to define, develop, implement and test the desired workflow.</p>	<p>None.</p> <p>Note: Any efforts requiring ITS involvement beyond standard services must go through existing project prioritization and resource allocation processes, and will compete with other requests.</p>	<p>Cost Avoidance: Per SunGard, workflow functionality allows "business events to trigger user notifications, business process logic, external or internal emails, and automated activities." Converting forms processing from paper to electronic will improve timeliness of transaction processing, provide a clear trail of a document's path through approval, and decrease instances of "lost" or stalled paperwork. This also provides an opportunity to streamline, simplify or even eliminate rote or mundane tasks, allowing staff to devote more time to other work; and may lessen additional staffing needs for certain types of positions even as the University grows overall.</p>
<p>8. Consolidate/standardize technology tools used for similar functions across campus units. Potential opportunities include:</p> <ul style="list-style-type: none"> Admissions (e.g., recruitment/contact management tools across Undergrad Adm, Grad School and DCL) HR tools (e.g., expanded use of People Admin being investigated) 	TBD	<p>TBD – responsibility shifts may impact functional units more than ITS. Must be determined on a case-by-case basis.</p> <p>Note: "System Inventory" analysis by ASUG Technology group may identify other opportunities.</p>	TBD – potentially none	<p>Cost Savings/Avoidance: University would save time and \$ overall by not investing in the purchase, development, implementation and support of multiple tools that serve similar functions. Business processes may, however, require changes to be compatible with standardized tools, or standardized tools may require changes to accommodate business processes. This could be facilitated by consolidating business process responsibility in some cases.</p>

<ul style="list-style-type: none"> • Other? 				
<p>9. Improve enterprise services to campus Macintosh users</p> <ul style="list-style-type: none"> • Make standard network file, print and desktop management services to Mac users more equivalent to the Windows users' experiences • Implement campus-wide site license for Macintosh OS, similar to the current "Campus Agreement" for the Windows OS 	<p>Bullet item 1 is underway, item 2 depends on funding</p>	<p>To ITS: Expanded responsibilities for networked services to better accommodate Mac users (currently being implemented through the AD/GCN migration). If purchased, management of the new Mac OS contract, including campus awareness and deployment, which will require time of existing staff.</p> <p>To Others: None.</p>	<p>To ITS: None. ITS funds are being used to cover the AdmitMAC for better integration of Mac's into the AD environment. Additional funds would be required to participate in the campus-wide license for the Mac OS.</p>	<p>Cost Avoidance: Better desktop management of Mac's will save client time by delivering a more user-friendly, stable and secure computing environment. Acquisition of the campus-wide Macintosh license would have additional benefits of eliminating the need for clients to purchase "one off" OS upgrades. \$ would not be a barrier to individual clients upgrading their OS, further promoting a stable, secure and up-to-date Mac computing environment. ITS would be able to provide more efficient services by providing a standard image with the latest Mac OS to all Macs capable of running that OS.</p>
<p>10. Create more robust web environment to host web 2.0+ applications of interest to clients</p> <ul style="list-style-type: none"> • Reduce need for stand-alone physical or virtual servers • Allow clients currently interested, but not using such technologies, to do so with relatively low time/money commitment 	<p>ITS pilot planning started, Oct 09</p>	<p>To ITS: This represents an expansion of current web services.</p> <p>To Others: None. Departments may choose whether to use these technologies.</p>	<p>To ITS: New position in the "web services" group will assist this effort.</p>	<p>Cost Savings: Exact technologies to be offered are TBD. Once the new services are established, some departments will be able to save money by decommissioning "virtual servers" that they purchase through ITS at an annual charge, or stand-alone physical servers they have purchased and must pay to maintain and upgrade. Overall, the service will be more cost effective than departments setting up multiple virtual or physical servers.</p> <p>Cost Avoidance: Departments that are not currently using these technologies, but wish to, can do so</p>

				without paying for their own virtual or physical server. Charges, if any, are expected to be primarily for disk space, and will be less than costs of running a separate server.
<p>11. Reduce # of campus stand-alone physical servers through server virtualization</p> <ul style="list-style-type: none"> Departments wishing to run servers with tools not offered by central ITS may do so without purchasing and maintaining a separate physical server 	Ongoing	<p>To ITS: None. This is a currently offered service, but the number of departments served is expected to increase as additional physical servers are identified through the AD/GCN migration project.</p> <p>To Others: None.</p>	To ITS: Departments pay an annual breakeven charge for a virtual server "instance" configured and hosted by ITS.	Cost Savings/Avoidance: ITS has saved substantial money through extensive virtualization of its own server environment. Client departments have saved money compared to the cost of purchasing a physical server.
<p>12. Reduce need for shadow/standalone databases that replicate collection and/or storage of information contained in University enterprise systems.</p> <ul style="list-style-type: none"> Where feasible, reduce the number of standalone systems by expanding services provided by enterprise systems (e.g., improved/expanded Banner Self Services, or Enterprise Portal; reporting enhancements with flexibility to meet various client needs) Where bullet #1 not feasible, provide better 	Some work ongoing	<p>To ITS: TBD – may involve support of new systems (e.g., enterprise portal), but in some cases relies only on expansion/modification of existing services.</p> <p>To Others: Obligations may be reduced.</p>	To ITS: Depends on scope – major service expansion such as portal implementation would require new resources. Most efforts require use of constrained MIS and/or ODM project resources, and likely other ITS areas as well.	Cost Savings/Avoidance: In some cases, departments may save funds used to develop or purchase stand-alone systems. Staff time for data entry and maintenance, as well as administration of stand-alone systems, would be reduced considerably.

<p>data integration (web services, data feeds/ snapshots, etc.), to reduce occurrence of duplicative data entry and maintenance</p>				
<p>Note for IT option#s 1, 2, 3, 4, 5, 7, 8, 9, 12</p>			<p>All of these assume ITS can reallocate current ITS staff resources, so priority-setting will be necessary, and some current services may be affected.</p>	

#4 Finance

	Apply to UNCG?		UNCG Issues
	Yes/No	How/Why?	
Challenges:			
1. Finance personnel are largely transaction oriented, with limited bandwidth to execute analysis or define strategy	No	Core Finance activities handled by central offices.	
2. State policies are key hurdle, driving process and system inefficiencies throughout organization <ul style="list-style-type: none"> Task completion requires significant experiential knowledge and is not intuitive for new hires Finance personnel are only able to spend ~50% of their time on core finance activities 	Yes	Same State issues.	There is no comprehensive plan to address trade-off between efficiency and risk tolerance.
3. Distributed organization often views task execution as a necessary component of decision-making	No		
Options:			
1. Efficiency Improvements <ul style="list-style-type: none"> Identify core policies and processes, and determine ultimate source or enforcing body (Federal, State, Donor/Grant Institution, GA, UNC, etc.) Consolidate existing Financial Systems into a single, consistent, user-friendly platform 	Yes No	Same external sources/bodies. Genie is user friendly.	
2. Unit Consolidation <ul style="list-style-type: none"> Elevate distributed finance function from departments and consolidate within Schools and Divisions Potentially cluster some smaller Schools and Divisions together to achieve scale 	No No	Options for Chapel Hill do not apply to UNCG. UNCG already has robust ERP in place.	
3. Central Finance Consolidation <ul style="list-style-type: none"> Transition dedicated finance personnel to central Finance Organization to elevate execution of core financial tasks. 	No	UNCG does not have a number of full business offices like Chapel Hill does, so opportunities to save significant costs by combining do not exist.	

#4 Finance (continued)

UNCG is considering the following additional options:

1. On-Line Approvals in Banner <ul style="list-style-type: none"> On-Line approvals were found to be problematic when Banner finance was first implemented. It should now provide a more efficient method for approving certain types of transactions including budget and journal entries. 	Better control, less paperwork.
2. Spending Guidelines by Fund Group <ul style="list-style-type: none"> Guidelines are scattered across a number of policies and procedures instead of residing within a single location. 	Better direction for spending.
3. Direct Deposit for vendor payments and employee reimbursements <ul style="list-style-type: none"> Separate bank accounts will be set up with depository bank. Stubs to be created in e-visions and emailed. 	Efficiency of handling fewer checks.
4. Enhancements to Budget Flexibility System <ul style="list-style-type: none"> Budget flexibility actions for position changes will be handled electronically, with validations and budget checking. 	Improve services and efficiency for state budgets including position control.
5. Automate Electronic Personnel Action Forms for SPA personnel <ul style="list-style-type: none"> Electronic forms are currently used for EPA personnel actions. 	Improve efficiency.
6. PeopleAdmin application and hiring process for EPA personnel <ul style="list-style-type: none"> This system is currently used for SPA applicants. 	Improve efficiency.
7. Improve Human Resources component of Student Employment <ul style="list-style-type: none"> There is no Human Resources Office currently for students. 	Improve services and efficiency.
8. Add W-2s to self-service <ul style="list-style-type: none"> Feature available within Banner is not user friendly, but some enhancement could make it viable. 	Better service, save mailing cost.
9. Implement Grants Billing <ul style="list-style-type: none"> Features were inadequate when Banner was implemented. This will automate bill generation for non-federal programs. 	Improve efficiency.
10. Implement the use of a Fringe Rate <ul style="list-style-type: none"> Allocability using current method is an issue. 	Improve cost accounting and reimbursement from grants.
11. On-Line Time & Effort Certification, including Cost Sharing <ul style="list-style-type: none"> The current process is manual and corrections for labor distribution are handled via a separate process. Cost sharing is handled by another manual process. 	Improve efficiency and controls.
12. Advanced Campus Training <ul style="list-style-type: none"> Development of an advanced training track and sharing of tips and tricks should continue to improve utility of Banner system. 	Improve effectiveness.

#5 Human Resources

	Apply to UNCG?		UNCG Issues
	Yes/No	How/Why?	
Challenges: 1. Central HR interacts with HR personnel with a wide range of HR experience and capabilities <ul style="list-style-type: none"> • <1/3 of all facilitators have an HR class title • HR facilitators spend anywhere from 5% to 100% of their time focused on HR activities • Heavy training and customer service burden for OHR due to high HR facilitator count 	No	UNCG does not have HR facilitators in depts. HR classification job titles in only two offices; HRS and EPA-HR	UNCG HR Liaisons, a better model
2. Existing HR systems and processes are often a hurdle instead of an enabler	Yes & No	If HR and other supporting functions are doing their job, they ensure the systems and processes assist line departments in being more effective and efficient while keeping direct labor costs as low as possible.	Expanded use of Banner EPAFS, PeopleAdmin web based recruiting system, and movement away from manual paper-based Affirmative Action approval system for EPA recruitments.
3. Handling requirements of state personnel system add complexity to HR processes	Yes	OSP processes and procedures are very bureaucratic and often outdated. They are built around a state agency model and do not accommodate the complexity of a state university system and the recruiting needs that require competing in national and even international markets.	Absent the ability to create a separate UNC HR system, UNCG continues to support making the OSP processes and procedures more user friendly and helpful to accomplishing the UNC and each campuses strategic plan.
4. Lack of clarity between roles & responsibilities of various 'HR' entities (Facilitators, EOO, OHR, etc.) drives inconsistent customer service	No	UNCG does not use the decentralized HR facilitator model. Most processes are centralized in the HR delivery depts.	UNCG HRS meets regularly with HR Liaisons to ensure consistency of service
Options:			

<p>1. Efficiency improvements</p> <ul style="list-style-type: none"> • Establish a single, consistent, comprehensive, and user-friendly HR system (like EPAWeb) • Eliminate self-imposed, University-wide process hurdles for core HR tasks • Determine funding model to support expansion of OHR responsibilities and continued investment into efficiency/effectiveness improvements 	<p>No & Yes</p>	<p>UNCG has a consistent HR system – Banner for all data management. Manual Affirmative Action processes slow down the recruitment process and need to be replaced with web-based processes that are more efficient.</p>	<p>Continue to fine tune Banner processes and implement enhancements as practicable. Replace EPA Affirmative Action processes with web based systems such as found in the People Admin system. Movement into Banner HR included realignment of some responsibilities among offices in an effort to improve efficiency, effectiveness, and accountability. Now that Banner HR has been live for 18 months, the present flow of work needs to be examined to ensure it is effective and efficient.</p>
<p>2. Organization structure changes</p> <ul style="list-style-type: none"> • Potentially establish dotted-line reporting relationship into OHR to ensure collaboration in key areas of compliance and procedure • Potentially establish hard-line reporting into OHR, with dotted-line into schools to ensure responsiveness to specific needs 	<p>No</p>	<p>UNCG does not use the HR facilitator model, all core HR processes are centralized</p>	
<p>3. Unit consolidation</p> <ul style="list-style-type: none"> • Elevate distributed HR task execution from departments and consolidate within schools and Divisions • Potentially cluster some schools and divisions together to achieve scale 	<p>No</p>	<p>UNCG does not use the decentralized HR model, all tasks are centralized into central HR departments</p>	
<p>4. OHR consolidation</p> <ul style="list-style-type: none"> • Disaggregate HR activities and elevate select scalable tasks to OHR • Elevate some value-added HR services to central shared service center (Determine funding model to support expansion of OHR responsibilities and continued investment into efficiency/effectiveness improvements) 	<p>No</p>	<p>All HR tasks and activities are centralized in core HR service departments.</p>	

UNCG is considering the following additional options:

1. Reorganize existing HR office structure

- HR functions at UNCG are currently divided between two offices, with one focusing on SPA personnel matters and the other assigned responsibility for EPA/Faculty personnel administration. At times, this structure can be confusing for UNCG staff members who need personnel assistance. UNCG will consider whether HR reorganization would provide benefits such as increased service effectiveness and efficiency.

Increase understanding of HR processes on campus, possibly increase efficiency and service provision

#6 Centers & Institutes

	Apply to UNCG?		UNCG Issues
	Yes/No	How/Why?	
<p>Challenges:</p> <p>1. Centers & Institutes exist throughout the university and have no standard reporting structure</p>	Somewhat	C&Is at UNCCH number 110; only 19 exist at UNCG. C&Is within schools and departments have reporting structure that is consistent with their school/department structure. All University-wide C&Is have consistent reporting structure across C&Is, being housed within the Office of Research and Economic Development (ORED) and all reporting to the Vice Chancellor of ORED.	Have recently established workgroups and meetings involving all C&I Directors to share best practices in reporting structure.
<p>2. Each Center & Institute often has its own support functions, including Finance, IT, and HR</p>	Somewhat	See #2 below for explanation	Have recently established workgroups and meetings involving all C&I Directors to share best practices in support functions.
<p>3. Limited consistency in policies & processes for managing C&Is, including:</p> <ul style="list-style-type: none"> • Adjusting funding structure • Approving new C&I • Reviewing performance 	No	C&Is within schools or departments are subject to the review, management and accountability of their respective departments in accordance with UNCG's institutional effectiveness procedures. University-wide C&Is are reviewed similarly by the Vice Chancellor of Research and Economic Development (VC ORED). All C&Is are reviewed by the VC ORED every five years using the criteria and information	<p>4. Limited consistency in policies & processes for managing C&Is, including:</p> <ul style="list-style-type: none"> • Adjusting funding structure • Approving new C&I • Reviewing performance

		provided in the permission to establish.	
Options:			
<p>1. Streamline reporting structure</p> <ul style="list-style-type: none"> • Authority of central C&I Oversight Committee (CIOC) is expanded to develop and enforce C&I policies • CIOC determines for each C/I if it is pan-university or should reside within a school • Pan-university C&Is report to staff dedicated to overseeing performance • C&I within schools report directly to Deans or Department Chairs 	Yes	C&Is within Schools already report to Deans or Department Chairs. University-wide Centers already report to the Vice Chancellor of Research and Economic Development. Structure and reporting is decided in the permission to establish, approved by the Board of Trustees, and is based on what structure best supports the mission.	None
<p>2. Share support services</p> <ul style="list-style-type: none"> • Create Unified Business Clusters (UBCs) consisting of a business officer and support staff (HR, Finance, IT) • C&I within schools encouraged to utilize school support staff • C&Is budget may be adjusted to cover UBC costs 	No	Due to the small number of C&Is at UNCG and the fact that they are located across all departments/units, creating UBCs would not reduce costs or increase efficiencies on this campus. C&Is within schools already utilize school support staff and other operational resources (e.g., space, copier). Some University-wide centers, which are located within the Office of Research and Economic Development, share business officers and support staff but others, due to mission, location of Center, and grant expectations must have some of these services within their operation to meet their mission effectively.	See #3 below

<p>3. Funding policies</p> <ul style="list-style-type: none"> • Modify continuation budgets and decrease amount of ongoing state funds C&Is receive • In some cases, may need to adjust F&A allocations to ensure C&I receives sufficient funds for operations • Rate of dependence on state funds will be directly related to mission • Two options exist for implementation of reduced state funds: <ul style="list-style-type: none"> i. Give each C&I (new or existing) one-time state “seed” funding; C/I can spend at their discretion over as many years as they choose ii. Set a target for max % of budget (or max \$ amount) that can be funded by state funds; Target may be defined on graduated scale over ~3-5 year timeframe 	Somewhat	<p>Several Centers have been eliminated and/or their funding cut as a reduction of the recent budget cuts. The remaining Centers and Institutes serve critical roles in regard to UNC Tomorrow and/or UNCG’s strategic plan or their units’ plans and are funded as needed relative to their role. Part of the permission to establish and the five year review is to examine budget and sustainability, progress toward meeting those goals, and “return on investment” for each center.</p>	<p>A continuing challenge is the funding of operational functions within C&Is. PIs currently receive an allocation of F&A; UNCG will review whether increased F&A allocations to PIs would result in greater productivity and success in meeting mission.</p>
<p>4. Establish start-up and review policies</p> <p>Start-up</p> <ul style="list-style-type: none"> • Define start-up policies for new Centers & Institutes, including: <ul style="list-style-type: none"> -Criteria for approval -Location within University (pan-univ. vs. within school) and reporting structure -Usage of UBCs & funding model <p>Review</p> <ul style="list-style-type: none"> • Establish process and criteria for reviewing C&Is and Directors of C&Is 	No	<p>The procedures to plan and establish all Centers and Institutes, whether University-wide or school/department specific are in place, consistent and follow the UNC system template. These criteria include identifying uniqueness of mission, reporting structure, evidence of nonduplication, connection to strategic plan, funding/ business plan and sustainability. Similar criteria are used to review the progress of all Centers at least every 5 years. Decisions to continue or discontinue are based on this review. In addition, C&Is and their</p>	<p>Will incorporate any changes in the request to plan document being reviewed by the Chief Research Officers on 11/19. Will consider more formal review more frequently than every 5 years.</p>

		Directors are reviewed by their respective supervisors using the criteria established within their unit, in accordance with UNCG's institutional effectiveness procedures.	
--	--	--	--

#7 Research & Compliance

	Apply to UNCG?		UNCG Issues
	Yes/No	How/Why?	
Challenges:			
1. Manual processes and non-standardization make it difficult for research support offices to scale quickly and meet demand of increased volumes	Somewhat	UNCG has been using RAMSeS for proposal tracking and approval and awaiting and ready to implement Tech Transfer and IRB modules.	UNCG is ready to implement the additional RAMSeS modules for Tech Transfer and IRB and reluctant to allocate monies for other systems if these modules are rolled out as anticipated by UNC-CH for spring 2010. However, if these are further delayed, may need to consider other options.
2. In addition, many support offices are already resource constrained	Yes	Units could benefit from additional staff and/or having functions currently completed by graduate or undergraduate students or work study students completed by permanent staff.	In order to meet ever increasing obligations for compliance assessments and reporting, while simultaneously growing the research enterprise, additional funding for permanent staff positions are needed.
3. Overlapping responsibilities at some research support offices result in confusion and redundancies	No	Little overlap exists within the Office of Research and Economic Development. In addition, a recent review has further increased coordination (see #3 below).	
4. Support offices are housed in different locations across and off campus, driving additional inefficiency	No	UNCG has “one stop shop” for all research activities.	
Options:			
1. Add automation <ul style="list-style-type: none"> Hire contractors into Office of Research Information Systems (ORIS) to automate key processes that support research In addition to (or instead of), consider purchasing “off the shelf” software for some of these systems 	No	UNCG already uses the automated system, RAMSeS for proposal development and approval. Currently working with UNC-CH on other modules. Currently converting all tech transfer data so as to be ready to load into Tech Transfer module (Innovotrak)	

		and preparing similarly for IRB module (SIMS) that is estimated to be ready 2/2010. Given the estimated release date of these modules, it is not cost or time efficient to pursue purchasing other systems. However, if the release of these other modules are significantly delayed, will consider the purchase of other systems. The Vice Chancellor for Research and Economic Development (ORED) has been in touch with other campuses about possible systems for adoption if these modules do not come on line.	
<p>2. Increase resources</p> <ul style="list-style-type: none"> • Hire additional 7-12 FTEs in select research support areas • Shift OSR personnel focus in conjunction with OSR reorganization • If Option 1 is selected, assess automation impact before adding resources in other research support areas 	Somewhat	Review of efficiency has led to reallocation of existing staff. ORED is working with individual schools to increase pre and post award support.	Given that the majority of the Office of Research and Economic Development is not funded through state funds, and a proportion of the existing state funds were cut earlier this fiscal year, funding for any additional positions will need to come from F&A recovery.
<p>3. Streamline structure</p> <ul style="list-style-type: none"> • Streamline OSR • Consolidate ORD and OIC • Build explicit capabilities and focus on industry research 	No	Recently completed review of functions within UNCG's research support offices. Have consolidated HR, web, and finance functions leading to the elimination of one position. Funds will be allocated for a new position focused solely on proposal development. In addition, UNCG is	Awaiting full implementation of tech transfer model to use as a platform for industry research

		participating as a pilot campus for the UNC system wide Innovation, Collaboration, and Acceleration (ICA) effort. As part of this university wide effort, ways to support industry research and innovation will be identified.	
<p>4. Co-locate research support offices</p> <ul style="list-style-type: none"> • Co-locate all research support offices into one campus building • May require dislocating current occupants of building 	No	In 2007, UNCG relocated all research support offices in new research administration building including Office of Sponsored Programs, Office of Research Compliance, Office of Technology Transfer, Office of Undergraduate Research all within the Office of Research and Economic Development in Academic Affairs as well as the Office of Contracts and Grants within Business Affairs, creating a “one stop shop” for researchers.	

#8 Energy Services

	Apply to UNCG?		UNCG Issues
	Yes/No	How/Why?	
Challenges:			
1. Savings are absorbed by annual utility budget adjustments (i.e., no lasting impact on UNC's GISF)	Yes	State Budget process adjusts utility budgets biennially.	
2. Expansion, in anticipation of new capacity needs, limits financial flexibility <ul style="list-style-type: none"> • High fixed costs • High debt service costs 	No	Utility master planning considers infrastructure needs.	
Options:			
1. Decrease operating expenses <ul style="list-style-type: none"> • Delivered coal... • Small 11 car deliveries... 	No	UNCG does not use coal. UNCG works w/marketer to secure best prices for fuel and w/Duke Energy for best electric rates.	
2. Reduce consumption <ul style="list-style-type: none"> • Energy Management Goal - reduce by 18% by 2015 • Use Vendor Performance Contracts to secure funding and guarantee results • Focus on retrofitting labs and improving control systems 	Yes Yes Yes	UNCG goal is 15% reduction. Already in place at UNCG. Energy efficient lab controls will be incorporated into renovations.	
3. Change Business Model <ul style="list-style-type: none"> • Spin off Energy Services Division as 501(c)(3) 	No	Not self op for electric.	

#9 Facilities Services			
	Apply to UNCG?		UNCG Issues
<u>Challenges:</u>	Yes/No	How/Why?	
1. Facilities Services has cut expenses and improved operations to serve a larger, growing campus	Yes	Budget cuts and growing campus are similar issue at UNCG.	
2. Housekeeping has funding to provide less than APPA service level 3, "casual inattention," and requires 40% more staff to provide historical level 2, "ordinary tidiness."	Yes	Inadequate funding issues is the same at UNCG.	
<u>Options:</u>			
1. Reduce Installation Staff - Grounds Services <ul style="list-style-type: none"> As the need for new landscapes in support of capital projects declines over the next several years, Grounds Services can reduce Installation Staff from 12 FTEs to 7 FTEs, retaining only non-capital project funded positions Remaining Installation Staff focus on recurring work, unrelated to capital projects Reduce Staffing levels through attrition Timeframe depends on Capital Projects Schedule 	No	UNCG does not have capital funded positions in Grounds.	
2. Improve Materials Purchasing and Delivery <ul style="list-style-type: none"> Hire 4-6 material runners to purchase goods for multiple jobs and deliver directly to the skilled tradesmen Material runners reduce the number of purchasers, which helps procurement consolidate spend with fewer vendors 	No	UNCG keeps stock of most common items. UNCG takes advantage of delivery from parts vendors such as Grainger. UNCG is conveniently located near vendors.	
<u>UNCG is considering the following additional options:</u>			
1. Staffing for Central Receiving Function <ul style="list-style-type: none"> This function is being handled ad hoc by Facilities Services. Create a part-time receiving clerk instead of detracting others from their responsibilities. 			Improve control and coordination over receiving function and reduce negative impact on other services.
2. Replace Work Order Management System <ul style="list-style-type: none"> Current system does not allow automation of customer communications of status or completion of work. 			Better service and improved efficiency.
3. Improve provision of Facilities Services support for weekend activities <ul style="list-style-type: none"> There is no standard weekend shift. Overtime is used. 			Improve effectiveness and efficiency.
4. Implement an Enterprise Electronic Card Access System on campus			

#10 Space Utilization

	Apply to UNCG?		UNCG Issues
	Yes/No	How/Why?	
Challenges:			
1. The number of students and classes are expected to grow	Yes	GA projects student growth overall to 27,000 by 2017	Currently only one new classroom building with 17 new classrooms is under construction. Severe shortages are expected by 2012 or 2013.
2. Sense of ownership and lack of central scheduling limits UNC's ability to efficiently schedule classes	No	All instruction is scheduled centrally. "Ownership" of classrooms rests with the Registrar and the Teaching and Learning Center.	
Options:			
1. Standardize class times <ul style="list-style-type: none"> Standardize the start time and optimize the day of the week to avoid creating gaps in classroom schedules Registrar coordinates classroom schedules to ensure standardization 	Yes & No No	Very few non standard times are used and only a few classes use non standard days. All instructional activity is scheduled by the Registrar.	Given UNCG's nearly universal standardization of class meeting times, the very insignificant efficiency gain realized by forcing all times and days to strictly follow standards would be more than offset by the pedagogical and other costs of such action.
2. Increase peak utilization <ul style="list-style-type: none"> Push more classrooms to be "general purpose" to facilitate higher utilization during peak hours Increase peak utilization 15% 	No No	All classrooms are "general Purpose" rooms. UNCG has the highest utilization of any GA surveyed universities.	UNCG's utilization is so high that virtually no peak time slots are available.
3. Increase off-peak utilization <ul style="list-style-type: none"> Push more classrooms to be "general purpose" to facilitate higher utilization during certain off-peak hours Increase off-peak utilization 8% 	No	All Classrooms are "general purpose" rooms	
4. Utilize resident hall seminar space <ul style="list-style-type: none"> ~16 classrooms attached to residence halls are currently underutilized and not included in the Paulien & Associates report 			

- | | | | |
|---|--|--|--|
| <ul style="list-style-type: none">• Increase available classroom space 1.4% by increasing utilization of this space | | | |
|---|--|--|--|

C. Organizational Structure

UNCG has recently finished two major planning efforts: “UNCG Tomorrow,” the UNCG report that was part of the UNC Tomorrow initiative of President Bowles and the UNC Board of Governors; and “The UNCG Strategic Plan 2009-2014,” a strategic planning effort that involved all UNCG constituencies in identifying the highest-priority goals for the next five years. Each division and academic unit has developed its own planning document tied to the UNCG Strategic Plan. Chancellor Brady and the rest of UNCG’s leadership team (including the leaders of the areas identified in the UNC-CH Bain Report) are focused on ensuring that our highest-priority goals will be accomplished.

The divisional statements on organizational structure (in the appendix) show that, contrary to the findings of the UNC-CH Bain Report, few UNCG areas have more than four to six layers of management, with most areas having four to five layers. We believe this is about as flat an organization as is feasible for a growing research university with more than 18,000 students. To the extent that precise information is available, we believe that UNCG generally has “spans of control” (numbers of people reporting to a supervisor) that are appropriate for a research university. Where there are small numbers of direct reports, we find two common explanations. First, in most of these cases, the supervisor doubles as a supervisor as well as a skilled “worker” within a group that is too specialized to incorporate with any other group and still be able to do its work. This is typical throughout UNCG where working managers are required to perform much of the work themselves, as well as provide supervision and leadership. UNCG managers are fully engaged in the functions for which they are responsible and are held accountable. The second common reason for a relatively small span of control at UNCG is the institution’s inability to expand the size of the working group due to insufficient resources – and thus must depend on the extraordinary labors of small groups of specialized staff.

The State budget difficulties of the past 18 months have led to significant reductions in staff size and operating budgets in the areas identified in the UNC-CH Bain Report and in other areas of the campus. UNCG protected its instructional budget and imposed budget cuts disproportionately on support organizations across the campus. This meant that area productivity had to increase sharply, since the work of these areas rarely goes down. Finance and Information Technology, for example, become increasingly important to campuses as budgets require them to work in more cost-effective ways.

UNCG’s leadership team will continue to give attention to ways to keep its structure lean, but being cost-effective requires effectiveness as well as cost reductions. Effectiveness comes from effective processes and effective staff. A theme in several of the narrative sections of this review is that UNCG depends heavily on the talent and experience of its staff.

D. Procurement

Background on UNC Chapel Hill and the Bain Report

The thrust of the Procurement segment of the Bain Report for UNC Chapel Hill is to better manage spending for non-personnel. Currently, there are decentralized purchasing decision rights and system limitations which hinder spending optimization. UNC Chapel Hill is looking at both interim and long term solutions to improve systems and to manage procurement. It plans to invest in adequate systems for data capture and process automation. UNC Chapel Hill plans to restructure the procurement organization to more heavily invest in strategic support for departments. The long term solution includes the use of a third party to provide many of the procurement functions.

Background on UNCG

UNCG has an experienced purchasing staff and a robust ERP system in place. UNCG implemented the Banner Purchasing module in 2006. It has been an improvement over the legacy SunGard FRS module and allows campus users better access to information on their purchases. Reporting for Purchasing is somewhat better, but not at a user level.

UNCG utilizes the State of NC Purchasing Card for small purchases. In 2006 a new reconciliation system (PCard Web Solution) was implemented that allows card transactions to be loaded from the bank and then reconciled. This system also provided for a process for clearing the transactions on a monthly basis. Cardholders assign a default fund/account to be charged, which reduces the data entry by only requiring entry when another fund source should be charged rather than the regular fund/account. A PCard Compliance Officer position was created in 2007. This position performs analyses and audits to ensure that PCard transactions comply with state and university policies.

Do the UNC Chapel Hill Challenges Apply to UNCG?

1. Decentralized purchase decision rights have led to vendor fragmentation and disparate pricing.
 - a. This does apply to UNCG for smaller purchases. The current environment is de-centralized and allows users to make certain purchasing decisions based on dollar amounts. For purchases up to \$2,500, a small purchase order or PCard may be used. For purchases between \$2,500 and \$5,000 no competition required. For purchases of \$5,000 and over competition is required. Purchases of \$25,000 and over must be posted to State Interactive Purchasing System (IPS). Purchases exceeding \$500,000 must be forwarded to State P & C for review and approval.
2. IT systems are not fully automated. Material and Disbursement Services (M&DS) must perform some processes manually. Data capture is insufficient, limiting the analysis necessary to realize savings.
 - a. No for the first part of this, because UNCG does have fully automated IT systems in place. However, UNCG does not utilize the commodity code feature because it is too vast and confusing for the requisitioner. This causes a challenge in reporting because data specific reports cannot be extracted from purchasing, e.g., spend analysis of actual office supplies or scientific beakers. In order to pull something similar to this, we have to know specific vendors and then review the orders for those vendors. This would be a very time consuming manual process. With separate processes for small (PCard) and large purchases (Banner), combined with the lack of using the commodity code features, data capture is insufficient.
3. Limited Collaboration between M&DS and internal customers hinders spend optimization and the setting/enforcement of policies.
 - a. This does apply in general to UNCG. There is no central repository of contract/vendor information.
4. Few resources dedicated to actively managing and reducing spend.
 - a. This does apply in general to UNCG. The Purchasing Office is responsible for issuing purchase orders for purchases in excess of \$5,000 and ensures competitive prices. However, there are limitations in the available tools and staffing to optimize spend.

UNC Chapel Hill Options per the Bain Report

1. Interim Internal Solutions:
 - a. Increase M&DS focus on strategic analysis. Reduce number of vendors and consolidate volume to generate leverage in negotiations.
 - b. Develop short term solutions while waiting for ERP and related procurement applications to come online. This includes process efficiencies and data-capture improvements.
 - c. Look to shed non-core logistical capabilities, where feasible and beneficial, such as receiving, delivery and storerooms.
2. Share Resources:
 - a. Utilize existing systems to reduce the level of manual processing by M&DS and improve data-capture. This includes the State of North Carolina's Accenture-run Ariba platform and UNC General Administration's SciQuest eProcurement application.
 - b. M&DS to focus on strategic analyses and policy recommendations to analyze and reduce spend.
3. Third Party Provider:
 - a. Hire a third party to provide procurement functions. This includes purchase processing, data-capture and spend analysis, vendor relationships and negotiations.
 - b. Alternative A – Select third party to provide procurement functions for indirect spend categories. M&DS will focus on policy recommendations regarding indirect categories (e.g. office supplies). M&DS will perform all procurement functions for university-specific categories (e.g. scientific/research equipment) including processing purchases and analyzing and reducing spend.
 - c. Alternative B – Select third party to provide procurement functions for all spend categories. M&DS will focus on policy recommendation and enforcement.

Do the UNC Chapel Hill Options Apply to UNCG and what Options will UNCG Pursue?

UNCG has already decided to move forward with the third option and is in the process of acquiring the SciQuest eProcurement application. The SciQuest eProcurement system will automate the entire purchase to pay process. It provides a “one-stop shopping” environment for all users needs. It's user-friendly and intuitive. The system is highly configurable which enables multiple views of multi-commodity catalogs. There is a search and compare function which allows for quick requisitioning and ultimately saves the user time.

The functionality for approvals is considerably better. Workflows can be easily created to preview approvals and track requisitions online. The requisitions can be routed electronically based on any requisition attribute, such as account codes, approvals, commodity codes. The SciQuest eProcurement system also provides departments reporting data in an easy to use format. Purchasing will be able to consolidate 'like' requisitions to minimize shipping fees and maximize discounts. UNCG will also be able to analyze easily the spend data in order to find opportunities for additional savings as well as be able to audit contract compliance.

In addressing the challenge of decentralized purchasing decision rights, SciQuest brings all procurement functions into one location. Users can shop, search, find spend data – all in one spot. They will be able to see available contracts and catalogs simply by logging in.

The Implementation of SciQuest will address the challenge of insufficient data-capture. By having the ability to easily analyze spend data and report on such, we will be able to identify where the university could benefit from a negotiated contract for additional savings. Departments are always asking for information on their purchases. Now, the data will be available via a dashboard for them. They will be able to track their order status online.

Also, the implementation of SciQuest will address the challenge of limited collaboration between purchasing and internal customers. UNCG will benefit greatly by centralizing the contracts/catalogs into a central repository that is fully accessible. It will increase contract compliance by showcasing contracts along with the products in the search results. Another feature of the system is for users to check stock availability real-time on catalog purchases. They will know before they buy. Purchasing will be able to assign 'flags' to contracts that will identify contracts as state contract, preferred vendor contract, diversity supplier, on-campus provider (e.g. Campus Printing), Green supplier, etc. It will also replace many of the paper catalogs that get delivered to campus and have to be updated annually.

A challenge for UNCG not on the Bain Report for UNC Chapel Hill has been Standing Orders, which will be improved by SciQuest. These are used primarily for open-ended orders such as large paper orders or facility supply orders. In Banner, the requisition must match the invoice line by line. An example is an order to Dell computers. The order will state a Dell Latitude Laptop xxxx for \$1,450. The invoice will come in with multiple line items that are priced individually that add up to the \$1,450. If a regular order had been created, this would cause the need for a change order and much communication between the A/P and Purchasing offices to assure the information was correct. SciQuest will handle all order fulfillments on the backend. SciQuest will assure that when a Dell computer is ordered on a single line item that the invoice will match that line item. Because we will be pulling order data from an approved catalog, the matchup of info between order and invoice is being handled by SciQuest.

Another additional challenge for UNCG has been Change Orders. In Banner, Change Orders can only be created by the Purchasing department and are very cumbersome and time consuming. A change order with multiple line items can take on average 15-30 minutes to process in Banner. In the SciQuest system, because the user can see the order status in real-time, they will have windows to initiate a change order themselves and it will flow through the appropriate channels. These parameters are set initially by Purchasing. This will put control of the order in the hands of the user and save time.

E. Information Technology

History and Broad Principles Relating to UNCG IT

Background: UNC-Chapel Hill and UNC Greensboro

UNC-Chapel Hill is a much larger and more complex university than UNC Greensboro. UNCG has neither a Medical School nor an Engineering School, two units that always have their own elaborate Information Technology (IT) capabilities. UNCG, until the late 1990s, had a serious underfunding in operating funds that affected central and distributed IT, as well as other non-instructional areas. At UNCG, academic and administrative computing were combined in the mid-1980s, and a Vice Chancellor/Chief Information Officer has been responsible for all central IT since then. Because this VC/CIO has been a member of the Chancellor's

Executive Staff, and has reported directly to the Chancellor, the priorities of central IT have reflected the priorities of the Chancellor and the University's senior leadership.

Bain report on IT challenges at UNC-CH

1. Distributed functions often drive redundant infrastructure (hardware & software) and support capabilities. Nearly 50% of servers are outside of central ITS. Many areas run their own web servers, databases, email, etc.
2. Current IT decision-making process is fragmented and unclear Central ITS and distributed IT leadership are often unsure who holds key decision rights.
3. Distributed units lack trust and confidence in ITS' ability to provide comprehensive support. Similar mistrust sometimes exists between distributed departments and school or division central IT office.

IT at UNCG

Until the late 1990s, central IT at UNCG was extremely understaffed and distributed IT at UNCG was also thinly staffed. When PricewaterhouseCoopers did a UNC System-wide study of IT capabilities on UNC campuses in the late 1990s, the PwC analysts were unable to believe that UNCG was functioning with such a small central IT systems and networks staff. Distributed IT staff did not exist in the Schools until the Provost and the VC/CIO jointly funded the first technicians in the late 1990s.

UNCG was the first UNC campus to implement the Banner ERP system, beginning with the Student, Financial Aid, and Accounts Receivable modules in 1996-98, and the first campus-wide, on-line registration in 1998. Since then, UNCG has implemented Alumni/Development, Finance, and Human Resources. UNCG also operates an Operational Data Store to facilitate reporting. Overall, UNCG's operation of Banner (from both functional area and IT perspectives) has been recognized by Ernst & Young and other analysts as meeting best-practice standards.

In the past decade, UNCG has implemented improved wired and wireless data networks that provide the foundation for all IT services.

IT staffing has increased from the low levels of the late 1990s, for both central IT and distributed IT. After recent budget reductions, central IT has 121 IT positions, and 118 staff outside the central IT organization have IT classifications. See appendix. (In addition, some staff members outside the central IT organization probably do IT work but are not classified that way.)

High-level IT priority-setting is done through the Chancellor's Executive Staff, which has the opportunity to have input to all major IT initiatives. In the early 2000s, a campus-wide governance process was developed for administrative computing, to prioritize the needs of all divisions and to manage centrally a wide range of IT scheduling and implementation issues. This process is now led by an Associate Vice Chancellor for Enterprise Administrative Applications, who reports to the Vice Chancellor for Business Affairs but is regarded as a campus-wide officer. (See appendix for a full description of UNCG's IT governance model.) Within the past year, considerable progress has been made in clarifying the ITS resource allocation and scheduling components of this process (for more information, see the section "UNCG status re Bain UNC-CH report assertion that 'Current IT decision-making process is fragmented and unclear'").

Cost-effectiveness initiatives at UNCG: central IT organization

Information Technology Services (ITS), UNCG's central IT organization, has sought over the past three years to develop a series of cost-effectiveness initiatives. The goal is to create sustainable technology services for UNCG or for UNCG operating as part of a multi-campus partnership.

Multi-campus examples include: UNCG hosting of the Blackboard learning management system for NCA&T State University, reducing the costs for both campuses; a UNCG/NCA&T partnership to extend networking in Greensboro; a UNCG/NCA&T partnership to create a Joint Data Center, eliminating the need to build new data centers for both campuses; and an interim Disaster Recovery partnership with Appalachian State University.

Initiatives underway at UNCG also include a Campus-wide Hardware Procurement program, to reduce purchase costs for all UNCG departments; a wireless refresh that significantly reduced costs for Academic Affairs and other divisions; outsourcing of student email to Google, to reduce costs and improve services (and a current implementation plan to do the same for faculty/staff email); a transition of voice services to Voice-over-IP, to build on earlier efforts to reduce costs and improve services; and anticipated elimination of the Novell infrastructure as part of the Active Directory/General Computing Network (AD/GCN) implementation currently underway. To promote transparency of ITS resource allocation and scheduling, in 2008-09, all administrative system priorities were combined into a single, campus-wide set of project priorities, with all available ITS staff resources identified for client prioritization.

Cost-effectiveness initiatives at UNCG: distributed IT organizations

UNCG's Libraries operate a strong IT unit that plays an essential role in advancing the Libraries' mission and helping the Libraries to maintain their national stature. This capability also has been credited with saving UNCG significant funds. It plays a lead role in UNC System-wide collaborative Library efforts, with additional cost-effectiveness benefits.

Other distributed IT staff play important roles in all divisions at UNCG.

UNCG's approach to providing IT services in the most cost-effective way

UNCG has long recognized the importance of scale in providing IT services: the larger the scale, the more cost-effectively services can be provided. For this reason, UNCG provides campus-wide IT services through a central IT organization that has the ability to amass the scale (number of students, faculty, staff served) necessary to justify highly trained staff and expensive facilities. For a university, it is always necessary to balance the cost-effectiveness of scale with the need to permit faculty and student latitude to respond to specialized instructional and research needs. The solution for UNCG is to balance a central IT organization, as strong as it can afford, with distributed IT resources, as strong as it can afford, while keeping the total number of IT staff and facilities at an appropriate level. UNCG leadership agrees that:

- the central IT organization should provide all campus-wide technology facilities and services
- distributed IT units are necessary to meet unit-specific needs, and they will avoid costly duplication of central IT services
- the central IT organization involves distributed IT units in campus-wide IT initiatives, and distributed IT units cooperate in these initiatives

ITS leadership regularly meets with distributed IT staff to discuss campus-wide and departmental technology issues, and to discuss how to make changes that permit our faculty, students, and staff to continue to have

access to the best available and most sustainable technology services, with the minimum disruption to campus operations. When ITS launches campus-wide initiatives to improve services, such as the current Active Directory/General Computing Network initiative, it involves distributed IT staff as partners. Distributed IT staff members are playing key roles in three projects that are part of the overall AD/GCN initiative: the Windows 7 implementation, and new campus-wide support for Mac and Linux computers.

Elaboration of Statements in Executive Summary re Information Technology

UNCG status re Bain UNC-CH report assertion that “Distributed functions often drive redundant infrastructure (hardware & software) and support capabilities”

At UNCG, most departments do not run their own servers. Those that do have increasingly moved to the ITS offering of a hosted “virtual server” environment in which ITS hosts and monitors the server OS, while the department is responsible for the software applications and supporting “middleware” running on the server. This provides greater consistency, security and stability than is typically afforded by a department running a physical stand-alone server outside of a data center. As the AD/GCN project progresses, network changes will require examination of the use and management of every distributed server on campus. We expect to see further reductions in the number of departments running servers. In the two client departments that have migrated so far, one server has already been decommissioned, with the department now using ITS-provided file services instead. We also expect that for departments that need to continue to run their own servers, the adoption of virtual servers in lieu of stand-alone physical servers will continue.

At UNCG, the ITS virtual server offering has been most popular for units needing to run web applications not currently supported by ITS central web offerings (www.uncg.edu, and web.uncg.edu). ITS recognizes that current web offerings do not meet client needs in the Web 2.0+ world where web environments are increasingly dynamic and collaborative. This October, ITS started planning for a pilot to test an entirely new web environment. If successful, the pilot would become a new enterprise-level web offering in FY 10-11 that would allow many clients now running their own web server (physical or virtual) to decommission these servers and use central ITS services instead, saving the clients both time and money. The “Google Apps” suite available through iSpartan is also anticipated to meet some client web/collaboration demands.

Databases that store data redundant with “enterprise” data are a challenge, both at the server and desktop database level. The challenge here is often not that clients insist on running their own databases and collecting their own data, but that insufficient ITS resources exist to currently meet all client demands for data access and integration. An impact of these redundant databases is an increase in the security effort required to maintain control of data resources. Proliferation of such systems can lead to increased data vulnerability. Work progresses through the project prioritization process to meet “one-off” client needs for data access that can either involve direct, real-time data access or the provision of periodic data feeds (“snapshots”) into stand-alone systems. ITS is also working with clients to globally improve data access to reduce the need for stand-alone, redundant data stores. Efforts include research into and development of Banner web services, potential new offerings such as an enterprise portal, and better reporting capabilities. In some cases, these efforts may entirely negate the need for a stand-alone system. In others, the stand-alone system may still be required due to its specialized function, but its requirement to store data that is redundant with, but often out of sync with, ERP data may be eliminated. (Note that no funding is expected to be available for a university portal in the next 18 months.)

Email traffic on UNCG's network is tightly controlled, such that email traffic entering or leaving campus on standard email ports must run through the central ITS-managed email gateways. Because of this, ITS believes it would be aware of any unit receiving email to a non-ITS server. Today, we do not believe that departments running their own email systems are a problem at UNCG.

UNCG status re Bain UNC-CH report assertion that "Current IT decision-making process is fragmented and unclear"

Over the past few years, UNCG has built a strong, documented governance structure and decision-making processes for enterprise administrative systems, through the Administrative Systems Committee and related governance groups. Progress has been made in incorporating key stakeholders into planning and decision making. How resources for projects are allocated and project work is prioritized has been a particularly challenging point due, in part, to the disparity between client demand and the availability of ITS resources to meet that demand. Within the past year, however, resource availability and project prioritization have been made more transparent to key decision-makers. Considerable work remains to refine the process and to raise awareness beyond key decision-makers, but this is expected to continue to progress well.

A greater challenge exists, however, for academic technology decision-making and project prioritization. Academic committees with a focus on, or key interest in, technology issues do not have clear decision-making authority/charges, may have overlapping areas of interest, and are unknown to many of their constituents (primarily faculty), who, in turn, feel they lack a voice and means of input into technology decision-making. A new technology office has been established within the Provost's office, and this provides an opportunity to establish clearer decision-making and prioritization processes for academic technology. Discussions on this topic have begun between ITS leadership, the AVC for Enterprise Application Administration, and the leader of the new Academic Affairs group.

UNCG status re Bain UNC-CH report assertion that "Distributed units lack trust and confidence in ITS' ability to provide comprehensive support"

As at most large universities, historical conflicts over authority and control of IT systems, as well as concerns about service delivery, have led sometimes to situations of mistrust between central IT and distributed technology personnel and their management at UNCG. Client feedback (e.g., gathered through ITS's External Advisory Committee) and ongoing interactions suggest, however, that trust has grown among significant areas within UNCG. Frustration regarding unmet needs, however, remains. Thus, ITS must continue to work with key decision makers in setting and communicating priorities. ITS must continue to use its resources to seek to quickly meet a variety of client needs. The IT opportunities described in the Executive Summary (e.g., WebFOCUS reporting coordination, new web infrastructure, ITS Application Administration Group) will better position ITS to respond to these demands. In addition, ITS has already made significant progress on efforts such as outsourcing faculty and staff email, that will shift ITS staff time away from the provision of "commodity" resources.

Managers of UNCG distributed technology staff and units also have a role to play in building the trust between central and distributed IT. Historically, there has been a perception that ITS is too focused on "security" issues. Distributed IT units must understand that security and audit concerns are real, and require their attention and cooperation. ITS will continue to emphasize the consultative and advisory role of the ITS Security Office.

UNCG status re Bain UNC-CH report recommendations to consolidate IT resources

This area requires the attention of units outside ITS. Opportunities may exist here, but likely on a much smaller scale than at Chapel Hill, where both distributed and central technology staffing numbers are much higher than at UNCG, and where greater redundancy of functions exists. In some cases at UNCG, distributed technology staff skills and responsibilities are highly specialized, and efficiency gains through consolidation are unlikely in those instances. For staff with highly specialized skill-sets (e.g., technology staff who are also subject matter experts in a particular area), the greatest value is often achieved through close, daily interaction and integration with others within the unit. This may outweigh any perceived or real benefits of consolidation.

The need for staff that are both technology and subject matter experts (e.g., Library IT staff) often drives the emergence of campus distributed technology functions. In such cases, consolidation of those staff and functions within central ITS would not be advisable. Attention is needed, however, to instances where distributed technology staff are indeed performing functions that are offered by, or could more efficiently be offered by, central ITS. We anticipate many instances where only particular functions are shifted to ITS-provided services (e.g., a stand-alone web server, or locally managed network file server), leaving the distributed technology staff assigned to their units, and increasing their time available to spend on issues within their area of specialization. Any area identified as a candidate for potential consolidation should be objectively analyzed, and due attention given to both the advantages and disadvantages of consolidation.

F. Finance

Background on UNC Chapel Hill and the Bain Report

The thrust of the Finance segment of the Bain Report for UNC Chapel Hill was to centralize currently decentralized functions and to automate clerical task execution to realize benefits of scale at a savings in the range of \$4.5 to \$9 million annually on the high end, but more realistically 50% less. The inefficiency issues at UNC Chapel Hill were primarily related to the absence of a robust ERP system and decentralization. The report indicated that current Finance and HR systems were insufficient, with processes built on exceptions and workarounds, and many manual paper based processes. This has resulted in significant redundancy and shadow systems and is evidenced by fragmentation and lack of scale in many operations.

It is important to understand that UNC Chapel Hill is an extremely large and vastly complex \$2 Billion organization. Deans' Offices and many departments have large staffs to handle the array of administrative and support functions and serve as business offices.

UNC Chapel Hill Challenges per the Bain Report

1. Finance personnel are largely transaction-oriented with limited bandwidth to execute analysis or define strategy.
2. State policies are often a key hurdle, driving process and system inefficiencies. Task completion requires significant experiential knowledge and is not intuitive for new hires. Finance personnel are only able to spend approximately 50% of their time on core finance activities.
3. Distributed organization often views task execution as a necessary component of decision making.

Background on UNCG

UNCG is a Research Extensive Doctoral Granting University, but is only 1/6 the size of UNC Chapel Hill and does not have a Medical School. The resources available to support the mission of UNCG are significantly less throughout the campus, than at UNC Chapel Hill. Accordingly, most Deans' offices and departments do not have full business offices and operate with generalists handling a multitude of administrative and support functions. Fortunately, UNCG does have the advantage of a robust ERP system in place.

In recent years, UNCG has been acknowledged for having best practices in a number of areas, for successful administrative systems implementations, and for sharing with other UNC campuses. In spite of having below average funding, UNCG has not only survived but has excelled in providing financial services and maintaining fiscal integrity. That is due in a very large part to having great people, some of whom are recognized as being at the top level for the UNC System. These individuals all have a depth and breadth of knowledge, positive can-do attitudes, the ability and inclination to solve problems, and a combination of dedication and hard work ethics. They are supported by a number of key people across campus that have similar attributes. We have also been fortunate to have had relatively low turnover in Finance and in other key campus administrative and support positions. Another contributor to excellence has been planning and management. This has been especially crucial in the systems implementations to ensure proper scoping and orchestration for complete and integrated solutions including all the necessary tools, interfaces and reporting. Additionally, the investment in initial and follow-up training of central office staffs and departments has resulted in greater acceptance of the new systems and effectiveness in having fewer errors.

For UNCG, the entire ERP is in place which provides significant automation efficiencies. UNCG made the decision to go to Banner over a dozen years ago with the early implementation of Banner Student, Financial Aid and Student Account Receivables systems. This was followed by the Alumni/Development system, and then more recently the Finance (July 2006) and Human Resources (July 2008) systems. But it was not just the Banner systems that have resulted in more effective and efficient processes; it was the acquisition and implementation of a number of additional components. There was a change in operating systems to UNIX for a more efficient and better supported environment. AppWorx was implemented to provide automated job scheduling and processing. A campus-wide reporting tool (Web Focus) was implemented to provide a best practice for reporting. E-Visions' Intellicheck and FormFusion were implemented to provide automated forms and for laser printing of checks, W-2s and 1099s. e~Print was implemented to provide electronic report distribution with secured access.

UNCG added additional utility to its processes by implementing system features and enhancements. UNCG raised concerns over the inadequacy of Banner's position control module from the onset and pushed for a UNC system modification to accommodate the required position control features. Budget revisions and budget flexibility authorizations were automated. Multi-year encumbering has been implemented for contract and grant funds. Electronic Personnel Action Forms with on-line approvals for a number of types of personnel actions have been put in place and more are in the works. The Spartan View was developed to provide campus users with position budgets, activity, and balances to improve control and efficiency in managing personnel budgets. Banner Self-Service (Genie) has been enhanced to provide user friendly access to financial and personnel information, and allows individuals to view their pay stub, leave balances and departmental budgets easily without having to print documents or forms. The list goes on. Because Banner is highly flexible, it is also extremely complex. The infrastructure associated with each instance of Banner is significant. As a best practice, UNCG uses a separate chart in the same Banner instance for its year end thirteenth month accrual and financial reporting process, which UNCG has shared with a number of other UNC campuses.

In reviewing the applicability to UNCG of the Finance section of Bain Report, input was solicited from a number of key individuals across campus. They were asked to provide suggestions as to where significant improvements could be made that will save the campus money and/or provide better efficiency. Their input has been incorporated into the options we are considering.

Do the UNC Chapel Hill Challenges Apply to UNCG?

5. *Finance personnel are largely transaction-oriented with limited bandwidth to execute analysis or define strategy.*
 - a. This does not apply in general to UNCG. Core Finance activities are handled by the Central Office at UNCG instead of distributed to Departmental and Deans Business Offices. [Following a regular purchase for example, the requisition is entered on-line by the department and flows to the Purchasing Office which issues the purchase order to the vendor. Upon receipt of the goods, the department enters the receiving information on-line. The invoice is sent directly by the vendor to the Accounts Payable Office to be entered on-line. The 3-way matching is done electronically. The payable is created and scheduled for disbursement and requested in cash management. A laser check is printed and positive pay information transmitted before authorization for release.] Transactions are initiated and approved within departments. Most of the activity is within the automated Banner systems which have edits and processing rules in place for each type of transaction. Central office staff review and process on-line with relatively minor manual intervention usually. The exception is travel, where a more manual and detailed review is necessary to ensure appropriate documentation. Self-service is available to departments to view financial activity and balances. The Finance staff is capable and does not have a limited bandwidth.
6. State policies are often a key hurdle, driving process and system inefficiencies. Task completion requires significant experiential knowledge and is not intuitive for new hires. Finance personnel are only able to spend approximately 50% of their time on core finance activities.
 - a. Yes, this applies to UNCG.
 - b. There needs to be a comprehensive plan statewide addressing the trade-off between efficiency and acceptable level of review. Efficiency is often evidenced by fewer and less comprehensive reviews and/or approvals of the more routine transactions and activities, which constitutes additional risk of error. An example would be the departmental use of a procurement card for small purchases instead of a requisition through purchasing to generate a purchase order. Such efficiencies save time and therefore taxpayers' money. However, auditors continue to expect a standard of perfection in all transactions. The result is that the reporting of minor audit findings increases as efficiencies increase. It would be helpful for UNC GA to take a lead role in working with the state auditors to define levels of materiality and error rates that are appropriate and acceptable in carrying out the state's business in the most prudent and efficient manner, below which there would be no audit findings.
7. Distributed organization often views task execution as a necessary component of decision making.
 - a. This does not apply in general to UNCG. Although there is decentralization, most of the specialists are in the central offices with generalists in campus Departments and Deans offices.

UNC Chapel Hill Options per the Bain Report

4. Efficiency Improvements:
 - a. Streamline Policies and Processes.
 - b. Consolidate diverse set of systems in advance of ERP implementation.
5. Unit Consolidation:
 - a. Elevate distributed Finance from departments and consolidate within Schools and Divisions.
 - b. Potentially cluster some schools and divisions together utilizing shared service centers.
6. Central Finance Consolidation:
 - a. Establish central finance capability to enable core finance task execution and strategic support for distributed units.

Do the UNC Chapel Hill Options Apply to UNCG?

In general, the Options being considered by UNC Chapel Hill do not apply to UNCG. This has to do with the differences in systems as well as the administrative support staff across campus. UNC Chapel Hill does not currently have an ERP system in place, while UNCG has a robust one which provides many automation efficiencies. UNC Chapel Hill has a number of fully functional business offices across campus, while UNCG only has a few. Thus opportunities for significant savings by reducing administrative support in departments and deans offices do not exist. However, UNCG does embrace the spirit and intent of the finance options being considered by UNC Chapel Hill and will be considering the options described below to improve services, efficiency and effectiveness.

Finance Options for UNCG

1. Implement On-Line Approvals in Banner
 - a. The use of On-Line Approvals in Banner was considered during the implementation of Banner Finance and found to be problematic. Now that the Banner Finance has been operational for several years, it is feasible to again explore using on-line approvals. The first area in which this will be addressed will be the implementation of approval queues for Journal Vouchers to establish a more efficient and automated method for approving journal vouchers by managers and supervisors. The benefits will include even better internal control along with the efficiency of having the approval occur on-line instead of shuffling stacks of paper from one desk to another. The expected timeframe for this initiative is Spring 2010, with the use of primarily internal resources, but may require modest ERP vendor consulting cost.
2. Spending Guidelines by Fund Group
 - a. Currently, guidelines for spending are scattered across a number of university policies and procedures. In order to provide clearer and better direction spending guidelines will be reviewed and brought together into a single document. The Spending Guidelines document will provide basic rules, regulations and precedents to guide the prudent, fiscally responsible and legal expenditure of university resources. Training will be provided to campus once the Spending Guidelines are complete. The expected timeframe for completion is Spring 2010 using existing staff.
3. Implement Direct Deposit for vendor payments and employee reimbursements

- a. The implementation of direct deposit of vendor payments and employee reimbursements is planned to be addressed in several stages. We will pursue setting up separate bank accounts with our depository bank to handle the ACH transfers. The first stage will be to do employee reimbursements and once that is working to next address vendor payments. We plan to email the payment stubs that will be created in E-visions. The expected timeframe will be to have direct deposit for employees implemented during 2010 and vendor payments the following year. There will be additional costs for our depository bank. Some efficiency should be achieved with handling fewer checks, but savings will not be realized since we will be handling disbursement two ways for some time to come.
4. Enhancements to Budget Flexibility System
 - a. The budget flexibility system was developed and implemented in conjunction with the implementation of Banner Finance in July 2006. It was designed to gather electronic approvals and justifications for budget flexibility transactions and to aid in the reporting of these transactions. This system is being enhanced to handle budget flexibility actions for position changes in the Banner HR system similarly to what is done in Banner Finance and will provide for validations, prevent insufficient budget issues, and calculate benefits. Once the budget flexibility transactions are approved they will be posted in Banner HR and Banner Finance. The validation of data and the electronic posting of approved documents eliminate errors. This enhancement is currently in process and should be in place for Spring 2010.
5. Automate Electronic Personnel Action Forms (EPAF) for SPA personnel
 - a. UNCG currently uses the EPAF functionality within Banner HR for EPA employee actions. Future development of EPAFs for SPA employee actions would give UNCG efficiency in employee action processing by making paper copies obsolete and speeding up processing time. Beginning actions to be converted from paper forms to electronic EPAFs would include terminations, funding changes, probationary to permanent employee status change, and other job status changes. These are scheduled for implementation beginning in November 2009. Other actions being considered are reclassifications, career progressions, horizontal transfers, and hourly rate changes.
6. Implement PeopleAdmin application and hiring process for EPA personnel
 - a. UNCG currently uses the PeopleAdmin system in the application and hiring process for SPA employees. Future adoption by the Provost Office to use PeopleAdmin to hire EPA employees would give UNCG efficiency in recruiting and hiring. We currently have a manual process to key the selected candidate for hire into Banner HR. Developing an interface between PeopleAdmin and Banner HR would eliminate this manual processing creating efficiency in timing and data accuracy.
7. Improve the Human Resource component of Student Employment
 - a. There is no Human Resources office for student employees. There are a number of offices that have responsibilities for certain functions and/or groups of students, but no office is responsible for the HR functions. A proposal was originally made as part of a re-engineering project in 1997 to create a student employment office that would include the HR functions. However, funding was not available and so the Payroll Office kept responsibility for getting students into payroll. With the implementation of the Banner HR system, internal control concerns surfaced, because access to setting up students also allowed access to other types of

employee job assignments. As a temporary measure, the payroll office is restricting access to the HR entry components to staff that have no access to the time entry component and vice versa. However, a longer term initiative will be pursued to move the HR functions for student employment to another office. The timeframe for accomplishing this will be by the end of the next fiscal year.

8. Add W-2s to Self Service

- a. We will investigate the possibility of implementing electronic W-2s through self-service, rather than printing and mailing them. The feature currently available in Banner HR to accomplish this is not user friendly, so some enhancement will be necessary. It is planned to have W-2s for multiple years available on self-service. This will provide increased efficiency and cost savings as well as provide better service to the employees. The timeframe for this initiative will be for the next fiscal year or beyond.

9. Implement Banner Grants Billing

- a. When Banner Finance was implemented, the grants billing function available at that time was inadequate. The most recent upgrade of the Banner software included some enhancements which may make the implementation possibly feasible. Currently, the billing is accomplished using reports and spreadsheets in a primarily manual process. Some grant sponsors have unique billing and reporting requirements that make it difficult to automate. However, a significant portion could be automated. The timeframe for implementation would be to begin no earlier than the next fiscal year. Some ERP vendor consulting would be required.

10. Implement the use of a Fringe Rate

- a. Currently, fringe benefits are directly charged to grants based upon actual costs. For grants, costs have to be both allowable and allocable (costs were incurred during the period of the grant and relate specifically to the grant). Some benefits such as terminal leave payouts and workers compensation are not paid every payroll. Thus, there is a possibility that when terminal leave or workers compensation is paid, the employee may be currently being paid on a different fund source than the one over which the leave was accrued. In connection with the development of the Facilities and Administrative Rate Proposal, the establishment of a fringe benefits rate is being initiated. The fringe rate will allow such costs to be charged to each fund on a monthly basis and put into a pool that will be used to pay the actual expenses when they are incurred. The timeframe for implementation will be for the next fiscal year 2010-11.

11. Implement on-line Time & Effort Certification, including Cost Sharing

- a. Time and effort certification is a requirement for all grants. Currently, this is being accomplished by generating reports based on labor distribution which are distributed to the department heads and principal investigators for verification and certification. The reports are signed and returned and tracked with a manual process. Changes to the labor distribution for differences identified during effort certification are handled through a separate process. The required capture and reporting of cost sharing is currently a separate manual process. An initiative is planned to identify, acquire and implement an on-line time and effort certification process that will include cost sharing. The timeframe for planning is for next fiscal year 2010-11 with implementation some time later.

12. Advanced Campus Training

- a. All campus departmental staff members who are performing financial functions have been well trained to do their jobs. Development of an advanced training track for these “seasoned” staff members would expand their knowledge. This advanced training could include tips and tricks, lessons learned, and helpful ideas solicited from campus users. The timeframe for developing the advanced training would be for fiscal year 2010-11.

G. Human Resources

Human Resources at UNCG:

Following a review of the UNC Chapel Hill Bain Report and in particular the section on Human Resources, it appears that there were three areas of concern expressed regarding the HR function on that campus:

1. Distributed support personnel often are not able to spend enough time on core activities
2. Processes often drive excess work for distributed personnel
3. Schools and divisions have not shown a consistent ability to realize scale benefits

The presence of more than 365 HR Facilitators in the various divisions and departments at UNCCH does not seem to be assisting in making a more effective and efficient HR organizational structure. A review of some of the ad hoc comments from HR Facilitators indicates that this structure creates barriers to productivity and the ability to perform more effective and creative tasks to enhance the overall mission of the department, division, and University.

Over the years, many of the processes and programs of the HR department have been decentralized to the departments and divisions at UNCCH and more specifically to the HR Facilitators. It appears that the HR duties they perform have actually become a part of their job descriptions.

UNCG has avoided that model with the creation of the HR Liaison Advisory Group. HR Liaisons, unlike the HR Facilitators at UNCCH, are invited to attend information dissemination sessions at least quarterly where HRS and other UNCG service departments provide valuable information, solicit input regarding centralized services and respond to concerns and issues with the best solutions available so that departments, units, and divisions can carry out their duties more effectively and efficiently. This model, unlike the model at UNCCH, assists the HR Liaisons to make better use of their time and devote more energy to productivity and creativity in enhancing and supporting the strategic plans of their department, unit, and division and ultimately the university.

UNCG Support Departments do not decentralize many processes or programs to departments or divisions. Where it is clearly in the best interests of the university, these departments have continued to centralize such processes as I9's, background checks, Everify reporting, inputting information into Banner HR, Benefits administration, Employee Relations, Training and Development, temporary hires, and other responsibilities. Most HR programs and processes appear to be decentralized at UNCCH and some carry an assessed fee. For example, Tar Heel Temps is the on campus temporary agency in HR that supplies temporary employees to departments for an administrative fee above the hourly cost of the temporary employee. At UNCG, HRS does not charge to find and process temps for UNCG departments. Background checks at UNCCH are performed by a former Police Officer who works for the HR dept. The UNCCH HR department assesses a service fee to the individual departments, rather than lodging the costs against a centralized fund, as is done at UNCG.

The Bain report has been instructive in that it recommends core HR processes and procedures be recentralized at UNCCH to relieve those administrative burdens from the outlying departments and ensure continuity and

accuracy in those processes. UNCG continues to ensure that the individual departments, units, and divisions are only asked to implement HR related processes within their offices that will ensure accuracy in their HR transactions and relevance in accomplishing their goals to hire, retain and develop the most effective and efficient workforce available. To that end, automated processes such as UNCG JobSearch (web based recruitment system) and HR Banner have been successfully implemented and have literally saved thousands of pages of paper each year and hundreds of hours of staff time that would be needed to implement, file, and otherwise maintain these HR transactions.

The human resources function at UNCG has, for many decades, been comprised of two separate offices, with one administering all matters pertaining to EPA personnel and the other addressing SPA personnel. As part of the review of the Bain Report, UNCG has begun to reconsider its HR organization, with the possibility of merging responsibility for SPA and EPA non-faculty issues into a single HR unit (leaving the leadership and management of faculty personnel matters in Academic Affairs). This suggestion was made approximately two years ago, and resulted in UNCG's decision to retain an external consultant (David Maddox, formerly of KPMG) to examine the relevant issues and provide recommendations. The report from Maddox Management Consulting, LLC (March 2007), cited many of the pros and cons of organizational restructuring, but ultimately determined that the costs would outweigh the benefits. Although no changes in HR organization were implemented, the following actions were taken at UNCG:

1. Banner HR has been implemented successfully for HR data management and budgeting and payroll processes. This has ensured a greater amount of consistency in processing HR-related actions.
2. Electronic Personnel Action Forms (EPAFs) were developed and adopted by EPA HR. (Now that these electronic forms have been tested and found to be worthwhile, the SPA employment office is implementing EPAFs for SPA transactions.)
3. UNCG JobSearch was implemented for SPA recruitments. (Now that the program has proven to be a valuable asset in recruitment and selection, EPA HR is implementing the process for EPA staff and faculty recruitments.)
4. The Chancellor has assembled an advisory committee to begin the process of developing an Office of Diversity, Inclusion, and Equity. It has been recommended that, once this Office's role had been defined and developed, UNCG's Affirmative Action processes and programs become a responsibility of this new office, as recommended in the Maddox Report and other studies.
5. Efforts to improve campus-wide understanding of HR policy and practice are underway. Clear, concise, and strategic communication is one of the keys in any organization's ability to effectively achieve such understanding and also implement its strategic plan. The Banner Users Group has recommended implementation of a management index tool that would be invaluable for communicating with UNCG's faculty and staff members at every level, ensuring that consistent and accurate information is disseminated to those who manage at all levels.

In addition to the actions identified here, UNCG is committed to reassessing its HR organizational structure in hopes of achieving greater efficiencies. Given the complexity of personnel procedures and the consequences of error in personnel processing and reporting, UNCG will move thoughtfully and carefully in its examination of the relationship between organizational structure and administrative efficiency and effectiveness. These

efforts will continue in Spring 2010 and the 2010-11 academic year.

H. Centers & Institutes

Centers and Institutes at UNCG

Situation

UNCG currently has 14 Centers/Institutes within Departments or Schools and another 5 University –wide Centers/Institutes, for a total of 19. All were established using the prevailing permission to plan and establish procedures, based on the UNC system guidelines. They were approved by the Board of Trustees, and in the case of the early University-wide Centers, were also approved by the UNC Board of Governors. These guidelines also form the basis of the mandatory 5 year review for all Centers and Institutes.

These Centers and Institutes play a key role in research, instruction, and community engagement, providing organizational flexibility and increased responsiveness. For example, with regard to research, over 25% of UNCG’s research awards come from Centers and Institutes. Because they vary in their respective missions, their reporting structures, staffing, and funding vary. All University-wide Centers and Institutes report to the Vice Chancellor of Research and Economic Development (VC ORED); as such, they have a consistent reporting structure. The Centers within the schools/departments have reporting structures that are consistent within their schools and departments, but may vary from each other in much the same way that departments and schools are both similar and different. The rationale for the reporting structure and location has been outlined and justified in their permission to plan/establish documents, as is the staffing and funding.

With regard to operational support functions, those Centers and Institutes within schools/departments utilize the support staffing (including finance, IT, HR) from their respective school or department. For University-wide Centers and Institutes, the smaller Centers and Institutes utilize support services within the Office of Research and Economic Development. Two of the larger Centers (e.g., one with \$20 million in research and the other with \$5 million) have HR liaisons and business managers, and one has internal IT support as mandated by their funders/deliverables. All Centers and Institutes utilize the University wide support functions of the offices of contracts and grants, accounts payable, Human Resources, Information Technology, and other service providers.

Several Centers were eliminated and others lost state funding as a result of mandatory budget cuts. The remaining Centers and Institutes receive limited state funding, with most of this funding comprising the salaries of the tenure track faculty who lead these C&Is. A portion of the F&A funds generated by contract and grant activity in the Centers and Institutes is returned to these entities, thereby creating a financial incentive to grow the research enterprise. This approach is consistent with the philosophy of F&A allocation at UNCG – to plow these resources back into the research operation to enhance our research capabilities and our success in attracting external support.

As mentioned, all Centers and Institutes are reviewed every 5 years using same criteria. In addition, individual Centers/Institutes as well as their Directors are reviewed more frequently (yearly with respect to Directors) within their reporting structures using procedures based on UNCG’s institutional effectiveness, promotion and tenure guidelines, and other internal procedures.

Challenges

The challenges facing Centers and Institutes at UNCG include: (1) funding and staffing operational supports, and (2) mechanisms for review and sharing best practices.

While department/school Centers and Institutes and some University-wide Centers share support staff with their units, many need additional administrative support. In addition, some Centers/Institutes that have their own support staff, struggle with mechanisms for funding these support positions. A-21 circular guidelines typically prohibit administrative support, unless performing a function specific to that grant and over and above that expected to be covered through F&A, so it is often difficult to direct-cost these functions. The current F&A return to Centers and Institutes is not sufficient to cover the needs, especially for those Centers and Institutes that have multiple grants/contracts and are comprehensive in size and staffing. We believe that having access to source of working capital would allow these C&Is to operate more efficiently.

Another challenge is the need to more effectively share best practices among Centers and Institutes and for some, there may need to be a more frequent review than every 5 years.

Possible Solutions

Although individual PIs and academic units are incentivized by the direct return of a portion of the F&A funding, some gaps remain in funding for many Centers/Institutes, including the need for additional funding for support positions. In addition, for inter- and cross-disciplinary Center initiatives, there can be a disincentive to collaborate because of the loss in essential F&A return as a function of the collaboration.

This issue, as well as other “best practices” needs to be regularly reviewed and shared among Centers and Institutes. Recently, the Provost has established a mechanism for Center leaders to meet and identify barriers and best practices. These regular meetings present opportunities to discuss the challenges and possible solutions. Since most Centers receive very little if any state dollars, any increases in support will need to come from F&A return.

I. Research & Compliance

Research Support and Compliance

Current Situations

The primary units providing research support and compliance are located within the Office of Research and Economic Development (ORED). These units are: Office of Sponsored Programs, Office of Technology Transfer, Office of Research Compliance, and the Office of Undergraduate Research (plus the University-wide centers).

Over 2 years ago, all units, including the Office of Contracts and Grants reporting to Business Affairs, were relocated in a new research administration building. This creates a one stop shop for researchers. This, and the implementation of RAMSeS for proposal approval and record keeping, have substantially changed how the research enterprise operates.

Within the Office of Research Compliance, a few years ago a support position was added to screen the initial IRB proposals before presenting to the larger committee thereby improving the quality of the proposals as well

as decreasing the time for review. An additional position was added this year to accommodate the significant increase in the number of proposals to be reviewed and the complexity of the proposals.

Challenges

The primary challenges can be summarized as related to: (1) staffing needs particularly related the demands of compliance assessment and reporting, as well as growing the university's research enterprise; (2) the significant increase in the number of proposals reviewed in IRB and the anticipated increase of more complicated and student proposals; and (3) the use of technology for IRB and tech transfer management.

Possible Solutions

ORED recently completed an examination of core functions across the various units to reduce duplication among functions such as web, HR, and finance. This has led to the elimination of one position. The funds will be directed toward the creation of a new position focused primarily on proposal development in general and to facilitate interdisciplinary/interunit proposals. In addition, ORED is working with individual schools to increase both their preaward and postaward support of PI's.

As mentioned, additional positions were added to address the increase in work for the Office of Research Compliance. Additional workshops are being planned to better educate faculty on the changing requirements and increased compensation was provided to the IRB Chair to cover the increase in time.

UNCG has been using RAMSeS for proposals for some time and is poised to utilize the additional modules for tech transfer and IRB. The rollout has been delayed but if these modules come on line as anticipated (Spring 2010), this will increase efficiency. At this point, it would not be cost or time efficient to explore other options given that these modules would be fully coordinated with the proposals. If it is delayed significantly, UNCG will review the options of other automated programs for these functions.

J. Energy Services

Background on UNC Chapel Hill and the Bain Report

The emphasis of the Energy Services segment of the Bain Report for UNC Chapel Hill is to reduce consumption and reduce costs. UNC Chapel Hill operates district energy and combined heat and power systems to provide utilities to the university and university hospitals. UNC Chapel Hill is a \$2 Billion organization with significant size and complexity in its facilities and infrastructure. Projects to provide utilities to meet growth as well as energy conservation projects bring challenges and require significant investments.

Background on UNCG

UNCG has focused on energy responsibility for a number of years. Facilities leadership provided a vision that has guided UNCG to address its infrastructure and energy requirements with conservation and sustainability in mind. UNCG has a steam plant which provides heat and hot water to most of the buildings on campus. It also has chiller plants which provide air conditioning to multiple buildings. UNCG was the first campus in the UNC system to enter into an Energy Savings Performance Contract to reduce energy consumption and save utility costs. UNCG has also developed a Strategic Energy Plan to reduce energy and water consumption.

Do the UNC Chapel Hill Challenges Apply to UNCG?

8. Savings are absorbed by annual utility budget adjustments (i.e., no lasting impact on UNC Chapel Hill's general institutional support funds.
 - a. This is true for UNCG also. The utility budget is adjusted as part of the state's biennial budget process. Energy savings are not retained by the campus and are removed from the budget.
9. Expansion, in anticipation of new capacity needs, limits financial flexibility. There are high fixed costs and high debt service costs for expansion.
 - a. This does not apply in general to UNCG. The utility needs are considered in the master planning and in the planning for new and renovated facilities. However, limited capital improvement funds create a challenge to provide necessary expansion.

UNC Chapel Hill Options per the Bain Report

7. Decrease Operating Expenses:
 - a. Delivered coal, used to generate steam and electricity is the largest variable operating expense. Coal prices are market driven. Transportation rates have grown 11% per year since 2004 and are above industry average.
 - b. Small 11-car deliveries, below industry average, are driving up delivery expenses. Expanding rail siding near the cogeneration plant will allow UNC Chapel Hill to receive larger deliveries.
8. Reduce Consumption:
 - a. Energy Management to aim for North Carolina goal and reduce energy consumption by 18% by 2015.
 - b. Use vendor performance contracts to secure funding and guarantee results.
 - c. Focus on retrofitting labs and improving control systems.
9. Change Business Model:
 - a. UNC Chapel Hill may be able to spin-off the current Energy Services Division as a 5019c)(3) to increase operational flexibility.

Do the UNC Chapel Hill Options Apply to UNCG and what Options will UNCG Pursue?

The specific details of Option 1 for UNC Chapel Hill do not apply as UNCG does not use coal. However, UNCG is actively engaged in decreasing operating expenses. UNCG's steam plant uses natural gas and it is bought through a marketer who buys gas on the wholesale market, and negotiates interstate and local transportation costs. The marketer and UNCG's Energy Engineer agree on prices to pay for the purchase of the future gas and triggers are set to buy gas when prices drop to those levels. The marketer also negotiates with TRANSCO, the interstate pipeline company, and Piedmont Natural Gas to get the lowest transportation rates possible. When negotiating transportation costs, the marketer uses the total cost of a BTU of gas compared to the cost of a BTU of #2 fuel. In some years the gas bill has been reduced by approximately 5% using this strategy. UNCG's Energy Engineer and Duke Energy perform a best rate analysis yearly for all of the electric accounts. During the past fiscal year, UNCG avoided over \$500,000 of increased costs compared to the next best alternative rate.

Option 2 to reduce energy consumption does apply to and is embraced by UNCG. UNCG's total energy per gross square foot consumption has been reduced by 14% from 124,642 btu/sft in fiscal year 2003 to 106,807 btu/sft in fiscal year 2009. UNCG's energy management program continues to work in reducing total energy use per gross square foot and aims to reach the energy consumption reduction goal of 15% by 2015. UNCG

has completed the first year of a 12 year energy savings contract with Trane. The report on actual savings has been received and is under review by the third party measure and verification consultant. During the current fiscal year, UNCG will evaluate the potential of entering into a second energy savings performance contract. UNCG incorporated energy efficient laboratory controls in the renovation of the Petty Science Building and will incorporate energy efficient controls in new construction and major renovations. However, limited repair and renovations funding significantly curtails the ability to undertake a major project in existing buildings.

Option 3 does not apply to UNCG.

K. Facilities Services

Background on UNC Chapel Hill and the Bain Report

The focus of the Facilities Services segment of the Bain Report for UNC Chapel Hill is to reduce costs, with an acknowledgement that there is no low hanging fruit. UNC Chapel Hill had already cut expenditures for facilities services and its staffing levels are below what is required to provide APPA service level 2, “ordinary tidiness.”

Background on UNCG

UNCG is in a similar predicament in that its Facilities Services resources are bare bones and staffing inadequate to provide the desired level of services on campus due to historical underfunding, budget cuts and a growing campus. UNCG has focused on defining and efficiently providing necessary services over the years. Most recently, the Facilities Operations Project Office handling minor renovations was merged into the Office of Facilities Design & Construction to provide a single point of contact for campus departments and reviewing agencies and to provide more optimal utilization of project management resources. This recent change should result in improved effectiveness and continuing efficiencies.

Do the UNC Chapel Hill Challenges Apply to UNCG?

10. Facilities Services has cut expenses and improved operations to serve a larger growing campus.
 - a. This is true for UNCG also. Budget cuts and a growing campus are similar issues at UNCG.
11. Housekeeping has funding to provide less than APPA service level 3, “casual inattention,” and requires 40% more staff to provide historical level 2, “ordinary tidiness.”
 - a. This applies to UNCG. The inadequate staffing and funding prevent delivery of services to the expected level in some areas.

UNC Chapel Hill Options per the Bain Report

10. Reduce Installation Staff – Ground Services:
 - a. As the need for new landscapes in support of capital projects declines over the next several years, Grounds Services can reduce installation staff from 12 FTEs to 7 FTEs, retaining only non-capital project funded positions.
 - b. Remaining installation staff focus on recurring work, unrelated to capital projects.
 - c. Reduce staffing levels through attrition.
 - d. Timeframe depends on capital projects schedule.
11. Improve Materials Purchasing and Delivery:

- a. Hire 4-6 material runners to purchase goods for multiple jobs and deliver directly to the skilled tradesmen. (This replaces ~ 8-12 FTEs of skilled job time.)
- b. Material runners reduce the number of purchasers, which helps procurement consolidate spend with fewer vendors.

Do the UNC Chapel Hill Options Apply to UNCG?

In general the options being considered by UNC Chapel Hill are not applicable for UNCG. However, UNCG is considering other options to improve services, effectiveness and efficiency which are described in the next section.

Option 1 for UNC Chapel Hill does not apply to UNCG. UNCG does not have capital funded positions in grounds nor a dedicated "landscaping installation crew." As part of the current budget cuts, Facilities Operations is eliminating 13 vacant positions in the current biennium.

Option 2 to improve materials purchasing and delivery does not apply to UNCG. UNCG has reviewed its strategy for securing parts and concluded that we would not benefit from hiring dedicated material runners. UNCG keeps stock of most common items such as lights and filters and spare parts for common repairs. UNCG takes advantage of delivery from parts vendors such as Grainger as much as possible. UNCG is conveniently located to a number of supply houses. Currently, one staff member runs parts 2 days a week for about 3 hours each time and a shop mechanic runs a part for a specific work order about twice a week.

Facilities Options for UNCG

1. Staffing for Central Receiving Function:
 - a. UNCG once had a central stores function housed in a building that is now home to Facilities parts and storage. The building still remains as the central receiving location for large university shipments. Consequently, Facilities Services inherited responsibilities for the receiving function in terms of unloading deliveries, signing off for deliveries and contacting departments to inform them of deliveries. Occasionally, Facilities Services staff assist in loading and delivery of the items to campus departments. As the university has grown, the number of deliveries has increased. This, combined with recent budget reductions that eliminated a number of housekeeping positions, is impacting the level of services provided by Facilities Services. Facilities Services supervisors are providing receiving services and not having the time to focus on their primary role.
 - b. An option being considered is to add a part-time receiving clerk. This would improve control and coordination over the receiving function and reduce the negative impact on other facilities services.
2. Replace Work Order Management System:
 - a. The work order management software does not support adequate communications to campus departments for which repair and renovation work is being done. Through surveys, campus departments have informed Facilities Operations that communications related to status and completion of work orders needs to be improved. UNCG currently has a manual system by which a customer service representative issues an email to campus departments when the work order is completed. This is inefficient and very difficult to monitor to ensure that all emails are sent. An automatic email generated by the work order system when the work

reaches a milestone and/or is completed would be more effective and efficient. The current work order software does not have the capability of sending automatic emails. The work order software vendor was acquired by another company. The new company has decided to migrate away from the work order software we are using. Accordingly, it would be a mistake to modify the existing software without support going forward.

- b. An option being considered is to replace the work order software with a solution that better meets our needs to provide better service and improved efficiency.
3. Improve Provision of Facilities Services Support for Weekend and Night Activities
 - a. As the university has grown, the number of weekend and evening academic and student programs has increased significantly. Facilities Services does not have a standard weekend or evening shift. Overtime is paid when Facilities Services is required to support these activities. Bills are issued for activities that are not supported from state funds.
 - b. An option being considered is to create a weekend and/or evening shift if it can be justified. We will also assess the level of service we are providing for buildings with heavy evening classroom use to evaluate shift assignments. The objective is to improve services, effectiveness and efficiency.

L. Space Utilization

Space Utilization at UNCG:

The Bain Report's "Key Question" seeks to find answers for meeting the demand from expected University growth with existing classroom space. The Report offers four improvement areas:

1. Standardizing class times and day of week assignments: This issue applies only marginally to UNCG. Class times here are generally standardized, with the exceptions justified by prevailing pedagogy or program-specific needs. Minor improvements could be gained by streamlining these few unique three-hour block schedules in the School of Education and School of Nursing. Standardizing the day of week assignment (Monday/Wednesday/Friday or Tuesday/Thursday) is also practiced at UNCG, with some exceptions. Addressing the exceptions has been considered in discussions between the Registrar and the Office of Space Management. It is estimated that forcing the issue would not result in a significant improvement in utilization.
2. Increase peak utilization and schedule classes to general assignment classrooms through the Registrar: This is already happening at UNCG. All classrooms are assigned through the Registrar. There are no "departmental classrooms" at UNCG. Utilization rates for classrooms here at 32 hours per week during prime time are higher by 6 to 12 hours per week than those of any other UNC Research University or Doctoral University I or II listed in GA reports. These rates do not include "Supplemental Instruction" classes and "Interlink" classes, which are not captured in the utilization reports.
3. Increase peak utilization in off-peak hours and encourage faculty and students to be more flexible during those periods (M-T, 8 AM and 5 to 9 PM): UNCG achieves this goal almost by default because our regular hours are nearly totally assigned. In day and night time hours combined we schedule nearly 38 hours, or between 8 and 14 hours more than research and doctoral universities listed by GA. However, by default the University may be forced to schedule more evening and weekend classes in the future because we are at or over capacity for other times.

4. Schedule classes in resident hall seminar rooms and overcome departmental boundary perceptions: This is an area where UNCG has the potential to gain instructional space. Currently the Registrar appears to have some concerns over access to resident hall space. With the growth of residential colleges and classroom/seminar spaces to be created in that context, UNCG should explore this avenue. There are no departmental classrooms or even seminar rooms and departments are already assigning some classes to conference spaces.

The Bain Report focuses on no other space gain opportunities because instructional space is and has been the one space category measured successfully for all disciplines. This is much more difficult in other space categories. Additionally, large research universities such as Chapel Hill, often have a mix of departmental and centrally assigned classrooms. That leads to inefficiencies, and this issue does not exist here.

UNCG is truly at or near capacity in classroom assignments because of two other issues:

1. With changing class sizes, we may not always have the right mix of rooms available. Thus some rooms cannot be assigned at times because the right size may not be available.
2. Departments request classrooms before registration. Expected demand for the number of sections is difficult to narrow down and it is in the interest of departments to overestimate anticipated demand. That allows departments to cancel the least desirable rooms and times when real demand is known. This process is an issue at all universities undergoing growth. The results are exacerbated for institutions like UNCG which have a very high “final” utilization rate to begin with.

The other measurable space category is “scheduled laboratory.” This can be a useful measure as there are three types of labs: scheduled, unscheduled, and research labs. Functionally they all may be similar. Thus if an institution has low hourly utilization of scheduled activities, and still has a good number of unscheduled instructional labs, then there is likely to be a conversion/reassignment opportunity. Unfortunately, this opportunity is small for UNCG also. OSM has reviewed lab use practices, and UNCG again has the highest utilization rate.

In conclusion, the approach of the Bain Report does not offer ideas for improvements at UNCG. All options (and more) noted in the Report have been or are being discussed here. They have been implemented beyond the goals set by the Report.

M. Conclusions & Next Steps for UNCG

This review was intended to be a detailed examination of the issues raised in the UNC-CH Bain Report. UNCG is engaged in continuous improvement. We’re always open to constructive criticism and educated brainstorming, whether internal or external, as means to improve the cost-effectiveness of our services and operations. This review has looked at cost-effectiveness progress UNCG has made in each of the areas focused on in the UNC-CH Bain Report, and we’ve sought to identify UNCG’s continuing challenges. We’ve identified a number of possible approaches to meeting those challenges, with an appreciation of the need to prioritize among initiatives and to recognize that some long-term cost-avoidance initiatives require investment of resources in the short-term.

UNC-CH, as is true of most large research universities, has decentralized a number of its services and operations. UNCG, as a smaller research university, has not gone nearly as far down the road of decentralization as UNC-CH, though there are excellent reasons why all research universities need to have distributed as well as central resources. At UNCG, the Information Technology, Finance, and Human Resources services that can be most efficiently and effectively provided centrally are largely provided centrally. The one area in which central services are divided between two central organizations is Human Resources, and here this review recommends that UNCG reconsider the present allocation of responsibilities between the offices currently responsible for SPA and EPA personnel.

The divisional reviews of organization structure pointed to a different view of managers at UNCG than has been characterized in discussions elsewhere of management layers and span of control. UNCG has primarily working managers, who are required to do a lot of the work themselves, as well as provide supervision and leadership. UNCG managers are fully engaged in the functions for which they are responsible and are held accountable. This model has worked well for UNCG, as shown by the many accomplishments and the absence of significant audit or operational problems, in spite of lean staffing and funding.

In addition, the role of systems is important. Because UNCG has long had excellent systems in place – we were the first UNC campus to take major steps toward implementation of the Banner ERP system – and because UNCG has been fortunate enough to have experienced staff in a number of key support areas – UNCG has been able to operate with a leaner staff than would be the case otherwise, while maintaining a high level of performance and compliance in these areas.

This review's Executive Summary and narrative sections provide a great deal of detail about possible next steps for UNCG. We recommend to the Chancellor, Provost, and Vice Chancellors, and to UNCG's other leaders, that serious attention be given to the initiatives suggested here. Some can be (and are being) handled within normal divisional channels, and others will require consideration through UNCG's excellent inter-divisional coordinating and priority-setting bodies.

We've received excellent cooperation from all areas of campus for this review, and we know UNCG will continue to support Chancellor Brady in her efforts to use all State and University resources in the most efficient way and in support of the State's and University's highest priority goals.

N. Appendix

• Organizational Structure

Response to request from the UNCG Bain Review Committee for

- “a brief statement describing the overall organization of your division, the role of managers at various levels, the layers of management, and the span of control. Identify any special circumstances in your division that affect these matters.
- “If you believe any changes are needed, please include a brief statement of your plans to address these matters during CY 2010.”

○ AAF Divisional Report

The Division of Academic Affairs is comprised primarily of faculty members, with the majority tenured or on tenure track. A significant number of other faculty members are employed on terms ranging from one to five years. Faculty positions account for the great majority of employment growth within Academic Affairs, but administrative staff members are also employed to provide administrative services, address business functions, and lead other non-instructional obligations of the division. Growth in the number of staff positions is extremely small from year to year, especially when compared to growth within the faculty ranks.

The division is led by the individual holding the post of Provost and Vice Chancellor for Academic Affairs (effective January 1, 2010, the position becomes Provost and Executive Vice Chancellor), hereafter referred to as Provost. The division’s structure, including its layers of management, may be most efficiently described by addressing separately the two types of organizations that report directly to the Provost: academic and administrative.

Academic Structure

Counting the Provost, the academic structure typically includes four layers, as follows: departmental faculty and staff members report to department chairs, department chairs report to deans, and deans report to the Provost. In some cases, a fifth layer may be present. For example, a faculty member who serves as principal investigator on an externally funded grant or contract may employ one or more directly reporting staff members.

Administrative Structure

Counting the Provost, the administrative structure within the Division of Academic Affairs typically includes five layers, as follows: staff members report to managers (various titles are used at all layers), managers report to directors, directors report to associate provosts, and associate provosts report to the Provost. In some cases, a sixth layer may be present. For example, in larger and/or more complex administrative operations, the presence of assistant directors or assistant provosts may add an additional layer of management.

The division’s structure is typical of other research universities in the United States. We believe, however, that the extent to which we employ “working managers” is greater than that which is common at other research universities. Senior academic administrators at UNCG do not direct relevant activities in their functional domains without also being personally engaged in substantive

aspects of the work at hand.

We believe Academic Affairs' current organizational structure is lean and efficient. It has allowed the Provost to effectively address important challenges facing our state and nation, and to pursue the changing priorities of the UNC System. A significant organizational change, effective January 1, 2010, will establish the Division of Student Affairs as a unit within the Division of Academic Affairs. With this move, the Vice Chancellor for Student Affairs, who presently reports to the Chancellor, will become one of the Provost's direct-reports.

○ **BAF Divisional Report**

The Division of Business Affairs is comprised of a multifaceted and diverse team of professionals, trades people, and operational staff to provide fiscal integrity and a wide array of services. The division is led by the Vice Chancellor for Business Affairs and is organized functionally with the following areas: Financial Services, Foundation Finance, Facilities, Human Resources, Campus Enterprises, and Safety & Emergency Management. Enterprise Administrative Applications, which has university wide responsibilities, also reports through the Vice Chancellor for Business Affairs.

The division's structure, including its layers of management, may be most efficiently described by addressing separately each of the functional areas. Management and staffing vary greatly due to the nature of the functions, the details of the activities and tasks, and the type and amount of supervision required. With historically lean staffing, Business Affairs is stretched in many areas to provide the necessary levels of supervision required for effective and efficient services and stewardship. All of the managers and supervisors are working managers in that they have to perform a significant amount of the work required for their area themselves in addition to providing leadership and supervision. With ever increasing external statutes, rules, regulations and directives from Federal and State Agencies as well as the UNC Board of Governors and General Administration, the experiential knowledge required for accomplishing and managing many of the functions is significant. Excluding the Police Department, there are up to 5 layers of management in Business Affairs including the Vice Chancellor, and there are up to 4 layers of management below the Associate Vice Chancellors.

The Police Department is a component of Business Affairs whose para-military structure is accepted as best practice throughout the world for police operations. The Chain of Command structure is critical in emergency and life threatening situations to show clear lines of authority.

Business Affairs' current organizational structure is well conceived and efficient. It has allowed Business Affairs to be excellent stewards of the University's resources and effectively provide services and run the business operations that support the academic mission. The span of control for supervisors in Business Affairs is typically 3-9 employees. Roughly 15% of those with supervisory responsibility supervise 1 person due to the size of the area (i.e., Enterprise Administrative Application has two people in the department), the complexity and uniqueness of the functions, and/or the workload that must be accomplished by themselves. We are continually investigating best practices for effective and efficient supervision within the division. Personnel cuts have created cross-mingling

of responsibilities.

○ **ITS Divisional Report**

The Division of Information Technology Services grew in institution-wide technology responsibilities and, thus, in staff between 1997-2007. Because of rapid changes in technology, client needs, and financial models, ITS has to be as flexible and responsive as possible. The division was restructured between 2003-2005 and, by fall 2005, had the flattened organizational structure that exists today. Counting the Vice Chancellor/CIO, there are no more than five layers of management in ITS, at any point – that is, four layers separating the VC from the most junior staff person. This flattened organizational structure, combined with a number of working teams that cut across and up-and-down the organization, are intended to maximize the flow of information and minimize organizational rigidity.

In 2009, due to State budget cuts, ITS reduced both its staff and its non-personnel budget by more than 10%, while taking on additional responsibilities. Eliminated staff positions (filled and vacant) totaled 14.58 FTE, including four senior manager and middle manager positions. In addition, several supervisory positions were restructured to remove supervision – thus, adding to the supervisory responsibilities of remaining supervisors.

ITS continues to be a leader in cost-effective, collaborative efforts with other UNC campuses. These efforts avoid costs for the universities, but require the time of ITS managers and staff to design and operate them.

Staff positions are occupied almost entirely by technology professionals. Almost all ITS managers themselves shoulder technology development/service responsibilities. That is, managers' staff supervisory roles are only a part of what we expect from them. This is especially true in small, highly specialized groups that play essential roles in ITS' ability to meet the technology needs of UNCG students, faculty, and staff. With three exceptions, all ITS supervisors have at least four direct reports; the exceptions are three specialized groups that cannot be combined with other groups: Database Administration, Information Security, and Network Design & Infrastructure.

Currently, ITS has 137 staff, plus two vacancies, eight temps/contractors, and 62 student employees. All ITS staff belong to a single department and all ITS funds are centrally managed. This facilitates a cost-effective use of money and people, and helps ITS to be transparent and accountable. Most staff are in three large groups: Administrative Systems, Client Services, and Systems & Networks. ITS has three Associate Vice Chancellors responsible for these three large groups, plus additional responsibilities. Smaller groups provide division-wide (e.g., Project Management) or University-wide (e.g., IT compliance) support services.

We believe ITS' current organizational structure meets UNCG's need for a flexible, cost-effective, service-oriented, central IT organization. We have no plans to make significant changes in CY 2010.

- **SAF Divisional Report**

The Division of Student Affairs has 13 direct service delivery areas and 3 administrative support functions that perform/provide a broad array of 1) functions primarily related to student success/support and 2) functions primarily related to student involvement outside the classroom. Staff positions range from housekeepers to physicians to counselors to functional specialists in areas such as disability services; and staff roles vary from provision of safe, appropriate physical environments/conditions for students, to provision of experiential involvement opportunities for students, to counseling and advising of students and student groups. Programs and services are focused on student academic and personal success, and on student optimal participation in the educational, cultural, and personal opportunities available in the University setting. Departmental budgets come from one or another of several funding sources including state funds, student fee funds, and auxiliary revenue.

There are approximately 185 full-time student affairs staff members. Almost all staff, including management, are heavily involved in providing direct services and programs to students (example Counseling and Testing Center director carries a caseload in addition to management responsibilities). The largest, most complex functions, which include facilities management (for example Housing and Residence Life with operating budget of \$17+ million annually), have as many as 6 layers of staff (for example housekeeper reports to supervisor who reports to housekeeping manager who reports to facilities manager who reports to department director who reports to vice chancellor)—that is, 5 layers of “management” including the vice chancellor. Smaller and/or more specialized units typically have 3 or 4 “management” layers (counselor/advisor to director to associate/assistant vice chancellor to vice chancellor). The vice chancellor and 2 associate/assistant vice chancellors each have 5 direct reports. Directors typically supervise several part time student workers and/or graduate assistants in addition to the full-time staff. More than 400 student employees work in student affairs departments in the course of an academic year; their training and supervision is a substantial time commitment. The current structure is both effective and efficient. However, substantial changes in organizational structure are likely to occur in 2010, when Student Affairs becomes a unit of the Academic Affairs division.

- **UA Divisional Report**

The purpose of the University Advancement Division is to raise private funds from alumni, corporations, foundations and friends of the University. Additionally, University Advancement is the external communications and marketing arm of the University.

The division has a total staff of 67 employees, lead by the Vice Chancellor for University Advancement who reports to the Chancellor. This position has 7 direct report departmental managers and an additional direct report support staff of 5. All of the direct support staff serve the entire Advancement division. The Vice Chancellor has managerial, administrative and \$5.3M budgetary responsibility for the division. June 2009 marked the successful conclusion of a capital campaign which raised \$115M for student scholarships, professorships and other academic initiatives. Additionally this executive level position encompasses responsibility for management of the institution, policy determination and implementation.

The 6 departments are described below:

Development

The primary role of this department is to raise private funds for the university by developing relationships with individuals, corporations and foundations. There are 2 Associate Vice Chancellors for Development managing 24 employees.

The Associate Vice Chancellor for Development Constituent Programs has management and oversight of 10 fundraisers: (2) A&S, Business, Music/Theatre/Dance, HES, HHP, Nursing, Education and (2) Planned Giving. This position customarily and regularly exercises discretion and independent judgment regarding budget and hire/fire decisions.

The Associate Vice Chancellor for Central Development has management and oversight of 10 professional staff including: (3) researchers, a proposal writer, 5 fundraisers: Student Affairs, Jackson Library, Graduate School and (2) Corporate & Foundation Relations. This position customarily and regularly exercises discretion and independent judgment regarding budget and hire/fire decisions.

These two managers have shared responsibility of 3 support staff.

Additionally, the Annual Giving department with 4 staff reports to the AVC for Central Development.

The Director of Annual Giving has 3 direct reports and approximately 50 student callers. The role of this office is to have student callers contact alumni annually for fund raising. \$2.85M was raised in 2008-2009. The Director manages the department, supervises staff and administers a budget of \$356,000. The position regularly exercises discretion and independent judgment including hire/fire decisions.

University Relations

The primary role of this department is to provide public relations, internal and external communications and market the University. The department is lead by an Associate Vice Chancellor for University Relations. The position has budget, administrative and managerial responsibilities. The AVC is the external media relations officer. The position customarily and regularly exercises discretion and independent judgment including hire/fire decisions. The department has 15 professional and support staff. The span of control is broken into four specialized work groups including: communications, creative services, marketing and web. The communications area has four writers reporting directly to the Associate Vice Chancellor and one writer/assistant editor who reports to the UNCG magazine editor. The Creative Services supervisor who reports to the AVC directs the work of four specialists in the areas of photography and graphic design. The marketing area has a marketing specialist reporting to the AVC and one direct report who is the speech writer for the Chancellor. Additional staff reporting directly to the AVC include a web designer and two support staff. The specialization of each of these areas requires distinct and unrelated skill sets. Supervision of 15 creative professionals cannot be successfully handled by the Associate Vice Chancellor given all the demands and responsibilities of the position.

Alumni Relations

The primary role of this department is to connect with and engage alumni of the University by providing programs and activities of interest, locally, regionally and nationally. The department is lead by a Director of Alumni Relations. The position has budget, administrative and managerial responsibilities. The position customarily and regularly exercises discretion and independent judgment including hire/fire decisions. The department has 6 professional and support staff reporting directly to this position.

Advancement Services

The primary purpose of this department is gift receipting, tracking and reporting of all donations to the University. The department is lead by a Director of Advancement Services. The position has budget, administrative and managerial responsibilities. The position customarily and regularly exercises discretion and independent judgment including hire/fire decisions. The position has two direct reports who each have one staff reporting to them.

Spartan Club

The primary purpose of this department is fundraising for scholarship support for Intercollegiate Athletics. The department is lead by a Director of the Spartan Club. The position has budget, administrative and managerial responsibilities. The position customarily and regularly exercises discretion and independent judgment including hire/fire decisions. The position has one direct report who is a professional fundraiser.

Capital Campaign

The primary purpose of this position is to direct and manage the Capital Campaign, and prepare for the next campaign by conducting a needs analysis and feasibility study. The Capital Campaign director has administrative and managerial responsibilities, exercises discretion and independent judgment including hire/fire decisions. The position has 1 direct report who is a professional fundraiser.

- **Information Technology**
- **IT Positions**
- **IT Governance structure**

Technology Positions at UNCG, 10/19/09						
	EPA non-faculty w/tech titles	Other EPA w/tech responsibilities	SPA w/tech titles	Other SPA w/tech responsibilities	New tech positions added w/EC\$	Total Staff
ITS	11	0	108	0	2	121
Outside of ITS	47	x	70	y	1	118+x+y
Total	58	x	178	y	3	239+x+y
ITS other professional positions	1	0	12	0	0	13
"x" = the EPA list does not include EPA faculty w/responsibilities for technology management nor EPA non-faculty w/such titles as Director, Associate Dean, etc., even though some have technology responsibilities						
"y" = the SPA list does not include some non-ITS staff who are given technology responsibilities						

UNCG Information Technology Decision-Making Processes

Information Technology Services (ITS), 12/11/2009

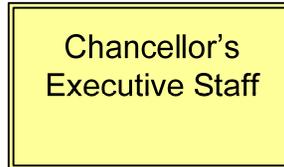
Contact: Gloria Thornton

- University Policy-making and Major Campus-wide Technology Decisions
- IT Governance Committees with Multi-divisional Representation (arranged by area of primary oversight):
 - Academic Affairs Primary Oversight (AAF): Blackboard Governance
 - Enterprise Administrative Applications/Business Affairs Primary Oversight (EAA/BAF)*: Administrative Systems Governance
 - ITS Primary Oversight: Supported Products Review Panel, Client Computing Committee
 - University Advancement and ITS Primary Oversight: Web Governance
- Internal Division Processes for Setting Priorities on Projects Requiring ITS Resources

* The Associate Vice Chancellor for Enterprise Administrative Applications reports administratively to Business Affairs, but has campus-wide responsibility for issues related to administrative systems.

UNCG IT Decision Making
University Policy-Making and Major Campus-Wide
Technology Decisions

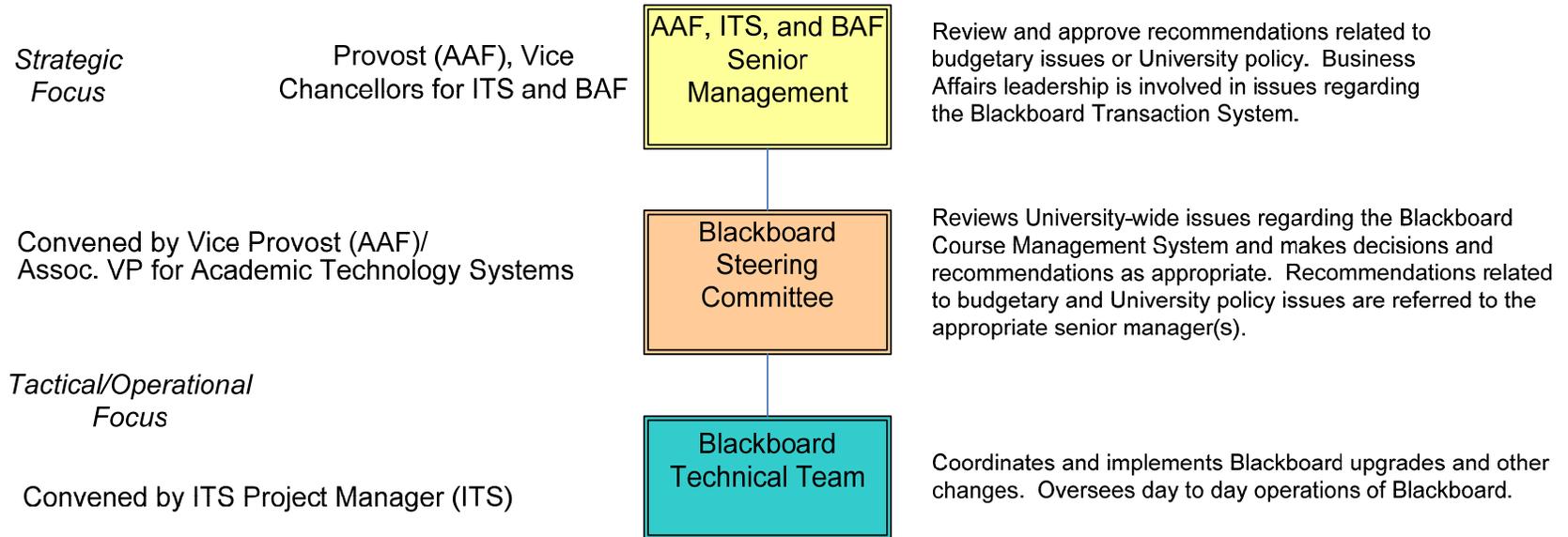
*Strategic
Focus*



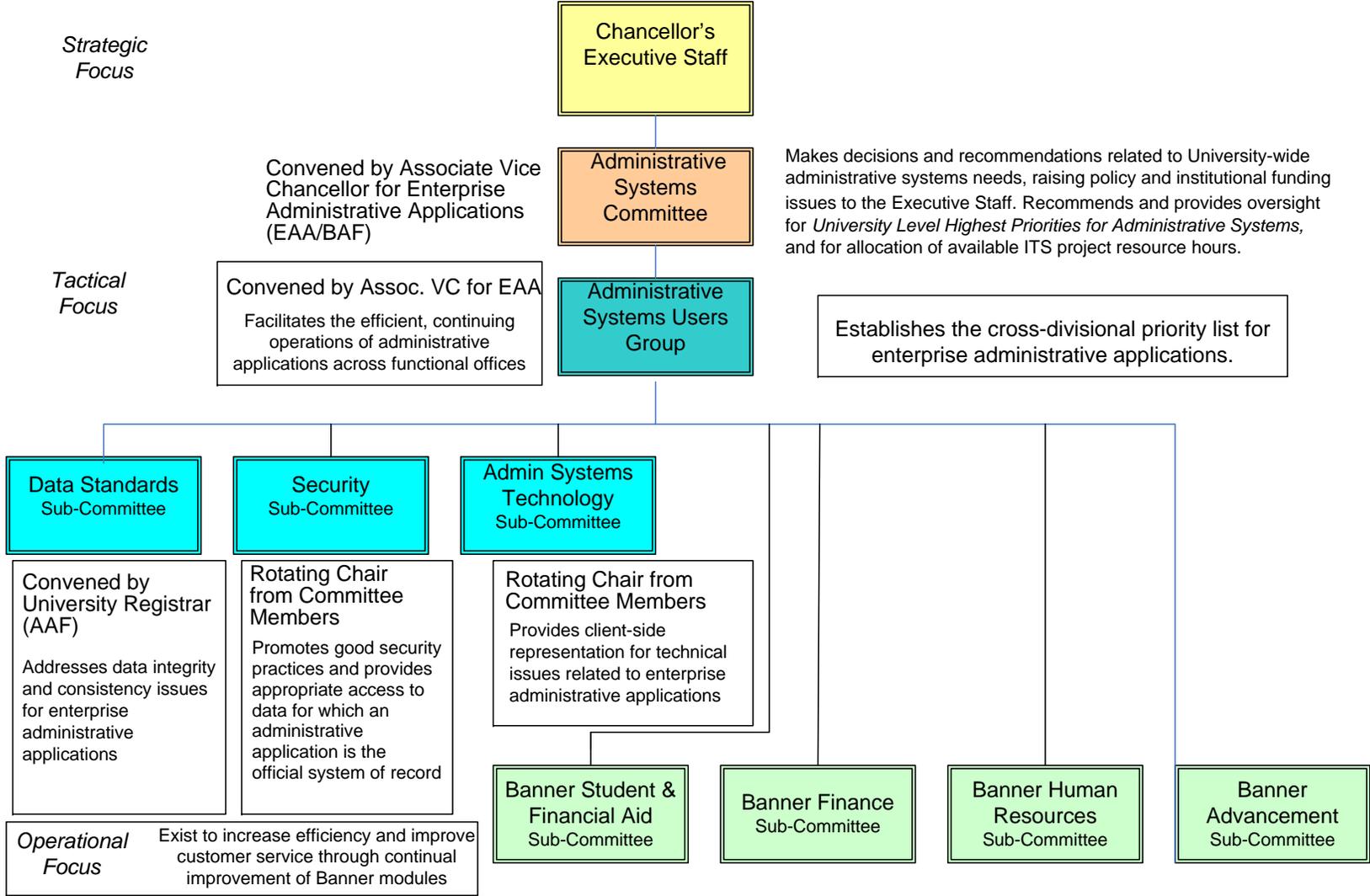
Vice Chancellor for ITS
brings policy and major
technology decisions to the
Executive Staff as needed.



UNCG IT Decision Making
Multi-Division Committees with Academic Affairs
Primary Oversight: Blackboard Governance



UNCG IT Decision Making
 Multi-Division Committees with Enterprise
 Administrative Applications/Business Affairs
 Primary Oversight: Administrative Systems
 Governance



UNCG IT Decision Making
Multi-Division Committees with ITS Primary
Oversight: Supported Products Review Panel,
Client Computing Committee

*Strategic/
Tactical Focus*



Tactical Focus

Convened by Assoc. VC for Client Services (ITS)

Recommends modifications and additions to the University technology supported products list in accordance with *Standards for Computer and Related Technology* - http://its.uncg.edu/Policy_Manual/Technology_Standards



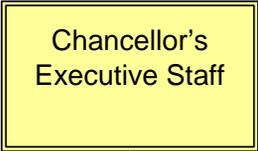
*Tactical/
Operational Focus*

Convened by Director of Technical Services & Architecture (ITS)

Charged with planning and evaluation of changes that affect the campus client computing environment, focusing on the use of desktops/ laptops and mobile computing devices to access UNCG resources.

UNCG IT Decision Making
 Multi-Division Committees with University Advancement
 and ITS Primary Oversight: Web Governance

*Strategic
Focus*



Convened by Vice Chancellor for ITS; co-chaired by Assoc. Vice Chancellor for University Relations (University Advancement), and University Webmaster (ITS)



Provides guidance for the management of UNCG's web presence in accordance with the *Oversight for UNCG Web Presence Policy* - <http://www.uncg.edu/woc/policies.html>.

*Tactical/Operational
Focus*

Convened by WOC Designee



Serves as a technical advisory group to the WOC as well as an implementation and training arm for WOC-related University web initiatives.

Note: The WOC is currently working on a proposal to disband the Web 3 group and replace it with ad hoc issue-specific sub-committees as needed.



Convened by WOC Designee

Addresses University web accessibility issues in accordance with the *UNCG Web Accessibility Policy* - http://its.uncg.edu/Policy_Manual/Web_Accessibility.

Note: The University also has a large and active Web Developers User Group which may influence technology decisions through Web 3, the WOC and other means.

UNCG IT Decision Making
Internal Division Processes for Setting Priorities
on Projects Requiring ITS Resources

